Spotted Dog

Wildlife Management Area Habitat Plan: March 2018

Spotted Dog Work Group

MONTANA FISH, WILDLIFE & PARKS

Spotted Dog Work Group

John Hollenback (Chair), Gold Creek: rancher, local/state leader in range management
Jim Flynn (Vice Chair 2013-2016), Anaconda: retired, business, local/state leader in governance (FWP, NRDP)
Jodi Pauley (Secretary), Deer Lodge: Powell County Agent, Montana State University Extension
Jason Swant, Helena: state government, Prickly Pear Sportsmen's Association (Chairman of the Board)
Bill Mosier, Deer Lodge: rancher, neighboring landowner, Deer Lodge Valley Conservation District (25 yrs)
Bill Pierce, Elliston: business, Powell County Planning Board, community leader, snowmobiler
Neil Horne, Helena: retired, P. P. Sportsmen's Assn (Pres.), Last Chance Backcountry Horsemen (Past Pres.)
Dan McQueary, Deer Lodge: rancher, neighboring landowner, Watershed Restoration Coalition (Board)
John Beck, Avon: rancher, Powell County Planning Board
Donna Young (Powell County Commission representative 2013-2016), Elliston
Doug Crachy (Powell County Commission representative 2016-present), Elliston
Brian Quigley, Avon: rancher, Rocky Mountain Stockgrowers Association
Liz Smith, Deer Lodge: Montana State Legislator (1993-1997), lifelong knowledge of Spotted Dog WMA
Louis Smith, Deer Lodge: rancher, neighboring landowner
Gayle Tomlinson, Deer Lodge: rancher, neighboring landowner, Deer Lodge Valley Conservation District
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Cover image

The cover art is a "word cloud," which we created using *tagul.com*. The words were input from the minutes of the first 22 meetings of the Spotted Dog Work Group. The word cloud displays the most frequently used words in the largest fonts. For example, "Manage" was used 225 times in the meeting minutes—the most frequently.

Table of Contents

Executive Summary

This is a Habitat Plan (including Public Access)

This is the Habitat Plan for the Spotted Dog Wildlife Management Area (WMA). For the purposes of this Habitat Plan, public use of the WMA is considered part of the manageable environment to which soil, vegetation, fish and wildlife respond. So, the reader will find a section on Public Access, as well as sections addressing Native Species Diversity; Species of Concern; Elk Winter Habitat; Fisheries; Aspen, Wetlands & Riparian; Native Bunchgrass; Antelope Bitterbrush; Coniferous Forest; Invasive Plants (Weeds) and Infrastructure.

Montana's Elk Management Plan Pertains

This Habitat Plan does not specifically address elk population management; i.e., elk numbers, objectives, harvest and hunting regulations. Elk population management is addressed in the Montana Final Elk Management Plan (January 2005), separate from this Habitat Plan. Spotted Dog WMA is located in elk Hunting District (HD) 215; elk management objectives and strategies for HD 215 can be found under the heading of Deer Lodge Elk Management Unit (EMU) in the Montana Final Elk Management Plan. In 2008, Montana Fish, Wildlife & Parks (FWP) revisited the elk population objective for HD 215 with a working group of interested citizens, resulting in a proposal to up the objective from 1,000 to 1,400. The Montana Fish, Wildlife & Parks Commission adopted the higher objective in 2008.

In 2008, the elk count for HD 215 was 1,365 and at its objective. Two years later, FWP acquired Spotted Dog WMA. In 2013, the Spotted Dog Work Group formed to work with FWP on issues related to the WMA. From 2009 to 2017 the elk count for HD 215 rose to 2,850, double its objective.

The Work Group and FWP understand that no matter its management, the WMA cannot feasibly attract enough elk from neighboring ranches to alleviate elk damage at these high elk numbers. Therefore, habitat management—the topic of this Habitat Plan—cannot substitute for elk harvest and population management, which is already directed by the Montana Final Elk Management Plan and must be addressed accordingly. These facts do not preclude livestock grazing as a tool for enhancing wildlife habitat on portions of the WMA and on private lands in a cooperative habitat management agreement.

Roles of FWP, the Work Group & the Public

FWP is responsible for managing Spotted Dog WMA in keeping with the goals for acquiring and maintaining it with dedicated public funds. Therefore, all citizens have a voice in WMA management.

FWP and the Spotted Dog Work Group collaborated to prepare a draft Habitat Plan for broader public review. The Work Group is comprised of 18 citizens, mostly from the area local to the WMA, representing landowners, sportspersons, government, education and other interests. The Work Group formed in 2013 and its meetings (~30 to date) are open to the public.

FWP advertised the draft plan's availability for public review and comment from 8 Nov. to 8 Dec. 2017, and held a public meeting in Deer Lodge on 30 Nov. 2017. Comments are preserved in Appendix H of this final Habitat Plan for continuing reference and consideration.

Formal public involvement as directed under the Montana Environmental Policy Act (MEPA) will be solicited if and when specific habitat projects outlined in this Habitat Plan are proposed in the future. Such projects would include livestock grazing on the WMA, a revised travel management plan, and land transactions, to name a few.

Purpose & Goals (page 8)

FWP acquired and established the Spotted Dog WMA on September 2, 2010. The goals of the purchase, as listed in FWP's grant application to the Natural Resource Damage Program (NRDP), were to protect priority fish and wildlife resources; enhance critical winter habitat for elk and mule deer; maintain migratory patterns to and from the National Forest for a regionally significant elk herd; provide lasting public access to previously inaccessible lands; maintain landscape connectivity between the Blackfoot and Clark Fork watersheds; and to replace lost and injured natural resources that were the subject of Montana v. ARCO.

The Work Group developed and adopted the following Guiding Principles for preparing the draft Habitat Plan:

1. The primary purpose of the Spotted Dog WMA is to benefit wildlife and fish habitats, and natural resources on behalf of the general public.

2. Actions will be sustainable for future generations.

3. Provide access for a wide variety of uses consistent with the management plan.

4. Be a good neighbor with the landowners and the residents of Powell County.

Area Description (pages 9-26)

Spotted Dog WMA covers 37,877 acres in south Powell County, with 27,616 acres deeded to FWP and 10,261 acres leased from the Montana Department of Natural Resources and Conservation (DNRC). Herein, we divided the WMA into five Management Units (MU) for planning purposes. Each MU generally corresponds with one principal drainage system and access route. The MUs also generally reflect broad distinctions of vegetation and wildlife.

The MUs present differing challenges of management. The O'Neill Creek MU (MU-1) contains the primary public access point to the WMA from the Deer Lodge side of the property, via Freezeout Lane; includes the Rocky Ridge communications site and the BPA 500-KV powerline; and is bordered by a residential area along Beck Hill Road. MU-1 and the Freezeout-Jake MU (MU-2) border ranches along the Old Stagecoach county road, which has been closed to public access in recent decades. Public access to MU-2 from the Jake Creek Road is also currently closed where the road crosses private land before reaching the WMA. The Spotted Dog MU (MU-3) also borders private ranches along the track of the Old Stagecoach Road, and includes the old Pauly Place buildings and corrals, as well as Spotted Dog Reservoir. Public access is available to the Trout Creek MU (MU-4) from Avon, continuing into MU-3. A groomed snowmobile route runs across MU-4 and the Forested Checkerboard MU (MU-5) from Avon to Elliston. MU-5 and part of MU-4 are unfenced against an active livestock allotment on the Helena National Forest. Whereas the other MUs will be managed with an eye toward the larger rangeland and riparian landscape, MU-5 will be managed with an awareness of its contribution as part of the larger coniferous forest.

Land Use History (page 16)

The property now known as Spotted Dog WMA has a long history of ranching, involving cattle and in earlier years, sheep. Under the purchase agreement (dated July 28, 2010) by which FWP acquired the WMA property from the Rock Creek Cattle Company (RCCC), it was agreed that RCCC would retain limited grazing rights on the WMA through December 31, 2012. At the request of RCCC, the Montana Fish, Wildlife & Parks Commission subsequently extended that grazing agreement through 2013. From 2014 forward, FWP has provided rest from livestock grazing as outlined in its Management Plan and the Livestock Grazing Amendments to the Plan contained in the Decision Notice for the purchase of Spotted Dog WMA (August 2010). Livestock trespass continues across the WMA's unfenced boundary with the Helena National Forest.

Ecological Inventory & Health (pages 27-28)

Hansen et al. (2015) characterized the soil, water and vegetation of FWP deeded lands across 90% of Spotted Dog WMA. Upland grasslands are in the best condition, and the best of the best are concentrated in the northernmost sections of MU -4. Conversely the problem area for upland grassland, shrubland and wetland environments is in western MU-1.

Despite the unhealthy and non-functional condition of some uplands in MU-1, O'Neill Creek ranked highest in ecological condition among streams, with an overall health rating of 79%. The MU-2 streams came second in order of ecological condition, with Fred Burr Creek at 74%, Freezeout Creek at 65% and Jake Creek at 61%. MU-3 followed with Spotted Dog Creek at 62%. Trout Creek, in MU-4, ranked last in stream health (54%).

Monitoring (pages 29-30)

The ecological inventory and health assessment (EIHA) by Hansen et al. (2015) offers a repeatable framework for future ecological monitoring. FWP will plan to repeat the EIHA by 2025 to monitor the condition and trend of vegetation under the influence of this Habitat Plan. Inherent in the repeated EIHA is a check for changes in noxious weed distribution. Photo points will be established to monitor representative habitats that are featured in this plan at more frequent intervals between replicates of the EIHA.

Maintenance activities on the WMA will be compiled in an annual report, including weed control, fence repair and other activities. Fish and wildlife surveys will be scheduled as needed in accordance with regional information priorities.

Prescribed management treatments, such as livestock grazing, fence construction and forest management, will be monitored during the periods while those treatments are occurring on the land to assure compliance with prescriptions and to identify adjustments that may be needed.

Invasive Plants (Weeds) (pages 31-32)

MU-1 had the highest proportion of sampling plots (51%) with >10% coverage of invasive species, followed by MU-2 (31%), MU-4 (26%) and MU-3 (21%) (Hansen et al. 2015). Twenty-two invasive plant species were identified on the WMA, with cheatgrass covering the most acres (632) and spotted knapweed ranking second (437 acres). Weed management objectives and strategies are addressed where they pertain under the resource headings/priorities (e.g., Native Species Diversity, Elk Winter Habitat, etc.) in this Habitat Plan.

- A weed management strategy common to every resource priority is to make a habit of documenting and treating new weed occurrences while driving roads, fixing fences and in the course of other duties on the WMA.
- Comply with FWP's Statewide Weed Plan and the Powell County Weed Plan. Encourage the public to report changes in weed species and distribution.
- Work with Powell County to develop a WMA weed map.

Looking east from Rocky Ridge on May 28, 2017

continued . . .

Executive Summary

Part of a Larger Whole (pages 33-34)

Cooperation is essential to achieve compatible management of fish and wildlife habitat across the larger landscape, of which the WMA is but a part. It will be a priority to budget for the time commitment required to work thoughtfully and effectively with our neighbors. For that purpose, FWP employs a decentralized operational structure. Locally-based professionals are vested with the delegated authority to speak and act on behalf of FWP, and are charged with becoming part of their local communities.

Native Species Diversity (pages 35-36)

Direction: Enhance the food web, focusing on the base of the energy pyramid: soil health, litter, native forbs, pollinators and the like.

Base Budget Items and Work Priorities:

- Prevent new weed establishments with early detection and eradication.
- Where herbicide is needed to control weeds, spot-spray whenever possible rather than broadcast spray, and use the most selective herbicide for the job.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Maintain boundary fences to minimize livestock trespass.
- Consider prescribed cattle grazing to enhance structural diversity in grasslands.
- When grazing, limit grazing impacts during the nesting season and/or rotate treatments.
- Allow litter to develop and decay in grassland communities where litter should accumulate.
- Prevent off road vehicular travel.
- Recruit and retain large snags in forests.

Priorities for Special Projects when Feasible:

- Consider forest restoration treatments to foster the recruitment of naturally occurring stand characteristics in historically harvested stands.
- Develop forest management treatments to manage the risk of stand replacement events.
- Remove conifer encroachment in grasslands, aspen, and wetlands as appropriate.

Species of Concern (pages 37-38)

Direction: Reverse population declines for Species of Concern.

Base Budget Items and Work Priorities:

- Maintain native species diversity in healthy habitats, and work to restore species diversity in degraded habitats. Native species diversity includes managing native plant communities to support species-rich native animal communities including songbirds, raptors, reptiles, amphibians, small mammals, and insects.
- Riparian, wetland, and aspen communities support the highest wildlife species diversity, so those communities need to be managed with special care to ensure their protection and enhancement on the WMA.
- Maintain and/or restore populations of Species of Concern that are naturally found in WMA habitats.
- Explore ways for the public to view and learn about wildlife, while minimizing impacts to wildlife and plants.

Elk Winter Habitat (pages 39-40)

Direction: Prioritize Elk Winter Habitat in MUs 1 & 2.

Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass and reserve forage for wintering elk.
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Coordinate closely with communications towers maintenance and powerline right-of-way maintenance.
- Retain forest stringers and thickets.
- Close WMA to the public from December 2-May 15.
- Control hunting access if hunting is needed during winter to achieve elk harvest goals, while minimizing disturbance to elk on their winter range.

Priorities for Special Projects when Feasible:

- Forest management will employ a light touch as needed in MU-1 and MU-2, if at all, to extend the function of small-acreage stands into the future and to manage risk.

Aspen, Wetlands & Riparian (pages 41-42)

Direction: Recover or restore aspen, wetland and riparian systems

Base Budget Items and Work Priorities:

- Protect aspen, wetland and riparian areas from noxious weeds as a focus of overall weed management efforts.
- Protect these areas from unauthorized livestock.
- Avoid and correct road, culvert and sediment impacts.
- Prevent damage from off road vehicles.
- Manage conifer encroachment in aspen.
- Protect beaver on Spotted Dog WMA.
- Recruit and protect snags, especially deciduous spp.

Priorities for Special Projects when Feasible:

- Plant native riparian vegetation (i.e., willows).
- Prescribe more extensive forest management and conifer treatment to rejuvenate aspen.
- Consider redistributing beaver at such time as the forage base would support beaver.
- In the absence of beaver, consider mimicking beaver activity with instream structures.

Fisheries (pages 43-44)

Direction: Enhance habitat for native westslope cutthroat trout.

Base Budget Items and Work Priorities:

- Protect streamsides from noxious weeds to minimize sediment delivery to streams.
- Protect streams from livestock impacts.
- Avoid and correct road, culvert and sediment impacts.
- Prevent damage from off road vehicles.

Priorities for Special Projects when Feasible:

- Utilize active stream restoration to address habitat degradation and channelization.
- Plant woody riparian vegetation where absent due to past land use practices.
- Remove or resize stream crossings (e.g., culverts).

Native Bunchgrass (pages 45-46)

Direction: Maintain climax rough fescue stands where they currently exist, and manage for soil stability and a healthy mix of native increasers and decreasers in bunchgrass vegetation types overall.

Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass.
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Consider prescribed cattle grazing to add vegetation community structure in grasslands other than designated rough fescue reference sites, and as a tool for achieving grazing improvements on privately owned bunchgrass communities as well.
- Confine motorized traffic to open roads.

Priorities for Special Projects when Feasible:

- Restore native communities on sites dominated by cheatgrass on a prioritized basis, pending the development of sound methodologies for cheatgrass control.
- Develop interpretive signage to increase the public's appreciation for native grasslands and their management.
- Remove conifer encroachment.

Antelope Bitterbrush (pages 47-48)

Direction: Reserve antelope bitterbrush stands for their unique wildlife habitat qualities.

Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass.
- Identify and eradicate new weeds or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Use biological controls or spot spray with the most selective herbicides to avoid damage to bitterbrush while addressing noxious weeds in MU-1 and MU-2.
- Keep elk numbers in balance.
- In MU-1 and MU-2 discourage public camping and prohibit fires.
- Limit motorized access to few well worn roads.

Priorities for Special Projects when Feasible:

- Monitor bitterbrush condition and trend over time.
- Monitor wildlife use in bitterbrush.
- Develop interpretive signage to help the public appreciate bitterbrush and its value.
- There may be a need at some point to intensively treat cheatgrass in bitterbrush stands, pending development of effective cheatgrass control methods.

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Executive Summary

Coniferous Forest (pages 49-50)

Direction: Coniferous forest makes up about 15% of the lands deeded to FWP within Spotted Dog WMA. Most of it lies within MU-5, intermingled in the Helena National Forest, and is largely cutover, having been harvested shortly before the property was acquired by FWP. In the near term, forest management on Spotted Dog WMA will be limited, as follows:

Base Budget Items and Work Priorities:

- Eradicate new weed species or weeds in new places.
- Protect snags and snag recruits.
- Prohibit wood cutting for offsite use.

Priorities for Special Projects when Feasible:

- Inventory the forest.
- Develop a forest management plan that focuses on regeneration of a healthy forest structure.
- Treat forest disease issues as they arise and take any preventative actions identified in the forest plan.

Public Access (pages 51-54)

Direction: Offer access to appreciate fish and wildlife, and to effectively balance wildlife with their habitat.

Base Budget Items and Work Priorities:

- Maintain open roads to WMA statewide standards.
- Enforce road closures and other user regulations to lessen user conflicts and resource damage.
- Manage hunter access to provide the publicly desired hunting experience and manage wildlife populations.
- Allow over-the-snow access on USFS Road 314.
- Maintain the winter closure to limit human disturbance of wintering elk and deer, with any exceptions as may be required to manage wildlife populations.
- Maintain effective signage, focusing on identifying property boundaries to prevent trespass on neighboring lands.
- Enact fire season restrictions with interagency collaboration.
- Develop and maintain updated travel maps, regulations and information online and on paper for distribution.

Priorities for Special Projects when Feasible:

- Develop portal/entrance signage.
- Develop a trail system, pending definition and funding.
- Identify designated camping areas if needed in the future, but avoid installing campground developments.

Interpretive Resources (pages 55-56)

Direction: Develop interpretive signage and other informational materials to enhance the public's appreciation of their WMA.

Base Budget Items and Work Priorities:

- Design and install a large-panel highway sign, to be placed along Highway 12 or other appropriate highway location, to inform the public about Spotted Dog WMA and identify its funding sources and purposes.
- Work with Audubon and local birders to develop a bird list and birding brochure for Spotted Dog WMA.
- Work with local historians to uncover and interpret the history of the Spotted Dog area.

Priorities for Special Projects when Feasible:

- Develop interpretive signage, recognizing that it is vulnerable to vandalism in remote locations.
- Develop a trail system involving low-profile interpretive signage and/or brochures. Consider a diversity of travel types, including motorized travel routes on the established open road system, as well as trails for nonmotorized use.

Infrastructure (pages 57-58)

Direction: Establish mutually beneficial property boundaries, facilities and improvements.

Base Budget Items and Work Priorities:

- Communicate routinely and effectively with Powell County, DNRC, USFS and neighbors.
- Cooperate with all affected parties on the Old Stagecoach Road issue.
- Work with DNRC on leases of DNRC lands to FWP.
- Work with private neighbors on fences, weeds, property exchanges, and trailing livestock across the WMA.
- Work with USFS on management of intermingled parcels.
- Prepare an annual report of maintenance activities.

Priorities for Special Projects when Feasible:

- Construct new boundary fences where still needed.
- Develop portal/entrance signage.
- Identify designated camping areas if needed in the future, but avoid installing campground developments.
- Work on proposing land transactions and public involvement to block up FWP ownership within the WMA.

Purpose & Goals

Purpose of This Habitat Plan

We are calling this the *Spotted Dog Wildlife Management Area Habitat Plan* to distinguish it from guidance for elk population management that is given for Hunting District 215 in *Montana's Statewide Elk Management Plan (2005).* The purpose of this Habitat Plan is to identify the priorities and strategies for conserving and enhancing fish and wildlife habitat on the Wildlife Management Area (WMA), and for cooperatively involving neighboring lands within the influence of the WMA. We intend for this plan to inform FWP in allocating its moneys and efforts to meet the needs and realize the potential of this WMA. We also hope that this plan will help the public develop informed opinions about FWP's management of the WMA, and offer avenues for people to provide FWP with feedback to improve management. This plan will outline a framework for how we intend to proceed, but individual actions will require separate analyses and opportunities for public involvement under the Montana Environmental Policy Act (MEPA) in the future when those specific actions are developed in detail and proposed for implementation.

Purpose and Need for Spotted Dog WMA

FWP's interest in conserving the Spotted Dog portion of the Rock Creek Cattle Company Ranch stemmed, in large part, from the property's value as winter habitat for migratory populations of elk and mule deer. In 2010, the property was listed for sale, and the risk of land development and habitat loss was heightened as a possibility with the change in ownership. At that point, Montana Governor Schweitzer negotiated the State's purchase of the property for the establishment of Spotted Dog WMA, using Natural Resource Damage Program (NRDP) funds. The goals of the purchase, as listed in FWP's grant application to the NRDP, were to permanently protect priority fish and wildlife resources; enhance critical winter habitat for elk and mule deer, maintain migratory patterns to and from the National Forest for a regionally significant elk herd; provide lasting public access to previously inaccessible lands; maintain landscape connectivity between the Blackfoot and Clark Fork watersheds; and to replace lost and injured natural resources that were the subject of Montana v. ARCO. FWP assumed ownership of the property on September 2, 2010.

Statewide Goals for Wildlife Management Areas

Montana's Wildlife Management Areas (WMAs) are lands owned and managed by Montana Fish, Wildlife & Parks (FWP) to benefit a diversity of native wildlife species and their habitats on behalf of the public and provide compatible public access for fish and wildlife related recreation.

Goals for Spotted Dog Wildlife Management Area

Guiding Principles:

1. The primary purpose of the Spotted Dog WMA is to benefit wildlife and fish habitats, and natural resources on behalf of the general public.

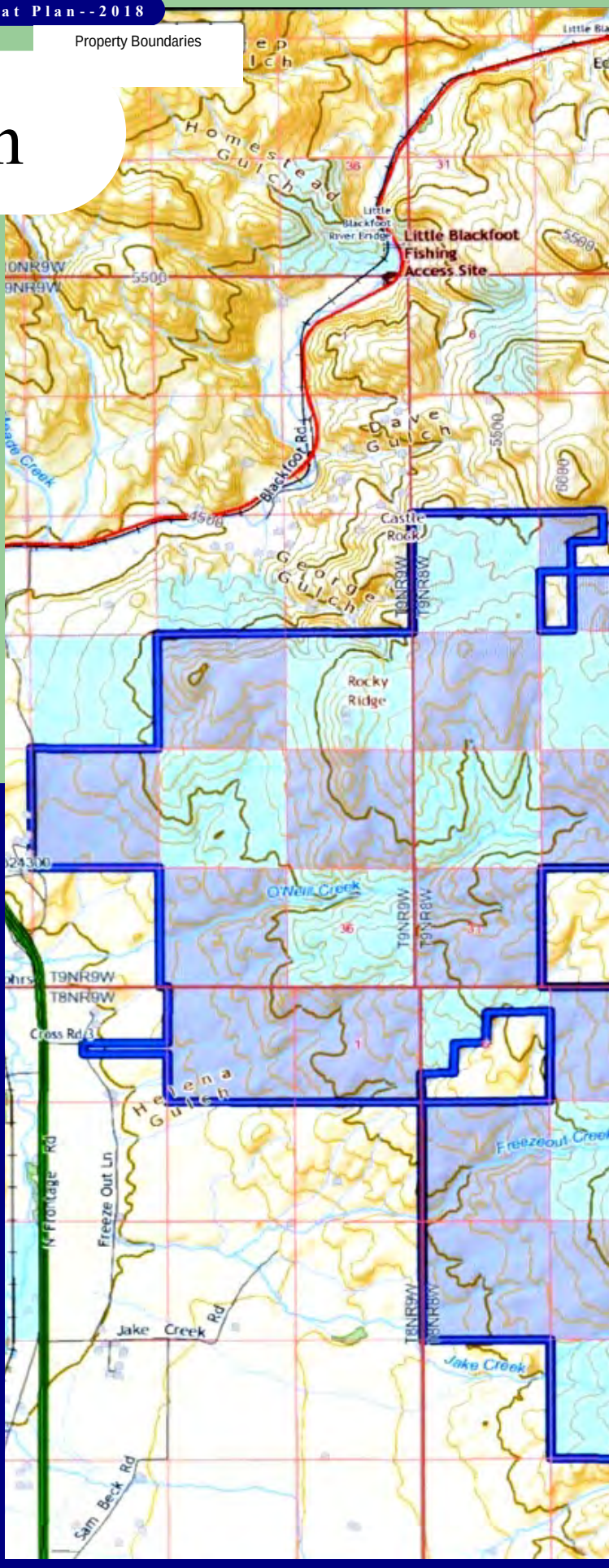
2. Actions will be sustainable for future generations.

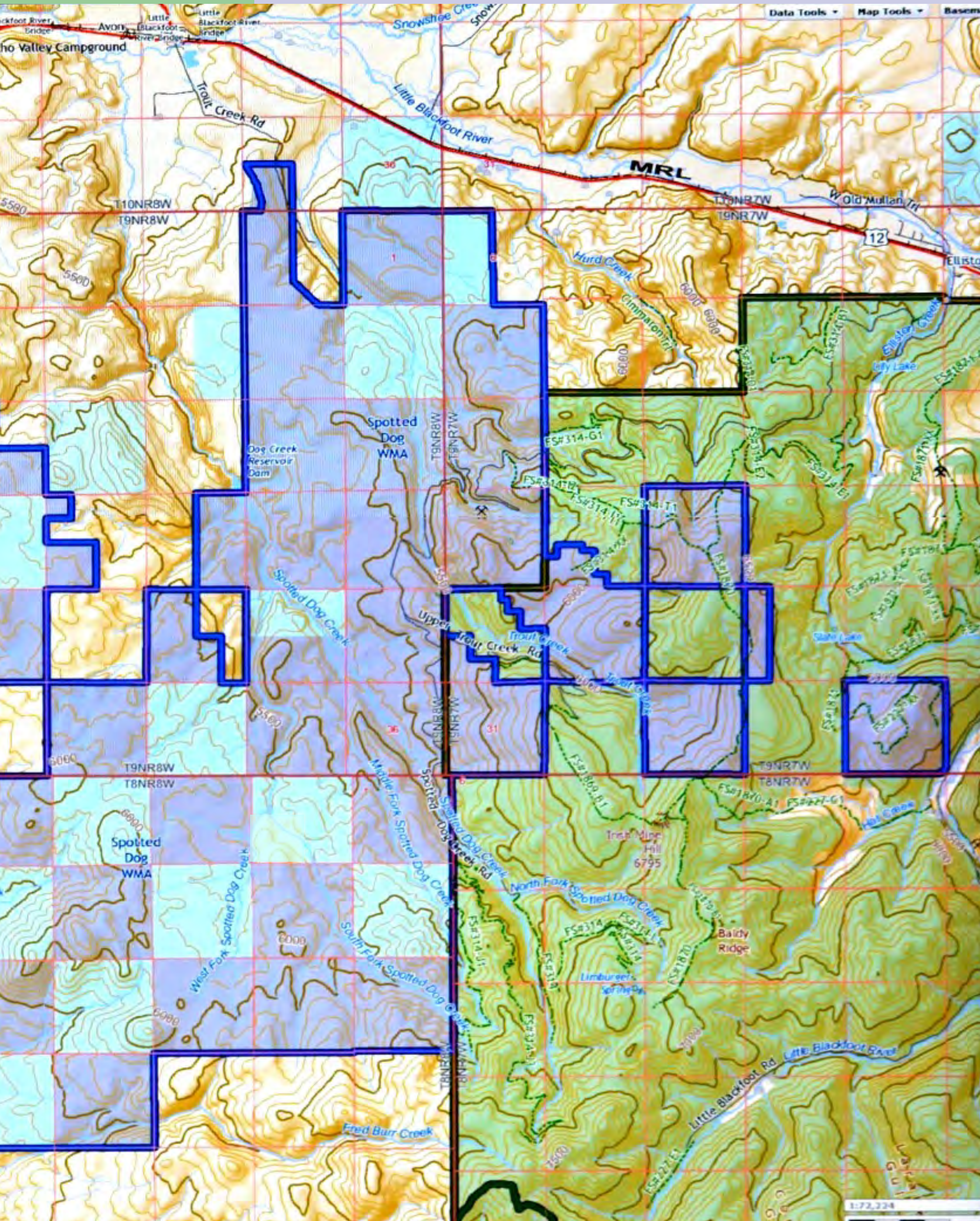
3. Provide access for a wide variety of uses consistent with the management plan.

4. Be a good neighbor with the landowners and the residents of Powell County.

Area Description

WMA boundary	
FWP deeded	
DNRC DNRC lands within the WMA boundary are leased by FWP	
National Forest boundary	
Helena National Forest lands	
Section lines (1 mi^2) & North Arrow	⇧
Acres Within the WMA Boundary	**37,877**
WMA Acres Deeded to FWP	**27,616**
WMA Acres Leased by FWP from DNRC	**10,261**




Data Tools
Map Tools
Avon
ho Valley Campground
Snowshoe Creek
Trout Creek Rd
Little Blackfoot River
MRL
T10NR8W
T9NR8W
T10NR7W
T9NR7W
W Old Mullan Trl
12
Elliston
Hurd Creek
Cimmaron Trl
Spotted Dog WMA
Dog Creek Reservoir Dam
Spotted Dog Creek
Upper Trout Creek Rd
Trout Creek
FS#314-G1
T8NR8W
T8NR7W
Middle Fork Spotted Dog Creek
Spotted Dog Creek Rd
North Fork Spotted Dog Creek
West Fork Spotted Dog Creek
South Fork Spotted Dog Creek
Irish Mine Hill 6795
Baldy Ridge
Limburger Spring
Little Blackfoot Rd
Fred Burr Creek
Slate Lake
Lilly Lake
Elliston Creek
1:72,224

Satellite Image

Area Description

This is an image by Google Maps, taken on June 25, 2015. It shows the landscape bounded (roughly) by U. S. Route 12 on the north, Interstate Route 90 on the west, Fred Burr Creek on the extreme southern edge of the image, and Elliston Creek and the headwaters of the Little Blackfoot River on the east. The approximate outer boundary of the Wildlife Management Area is overlain for general reference.


Avon
Avon Family Cafe
Elliston
Spotted Dog
KADING CABIN

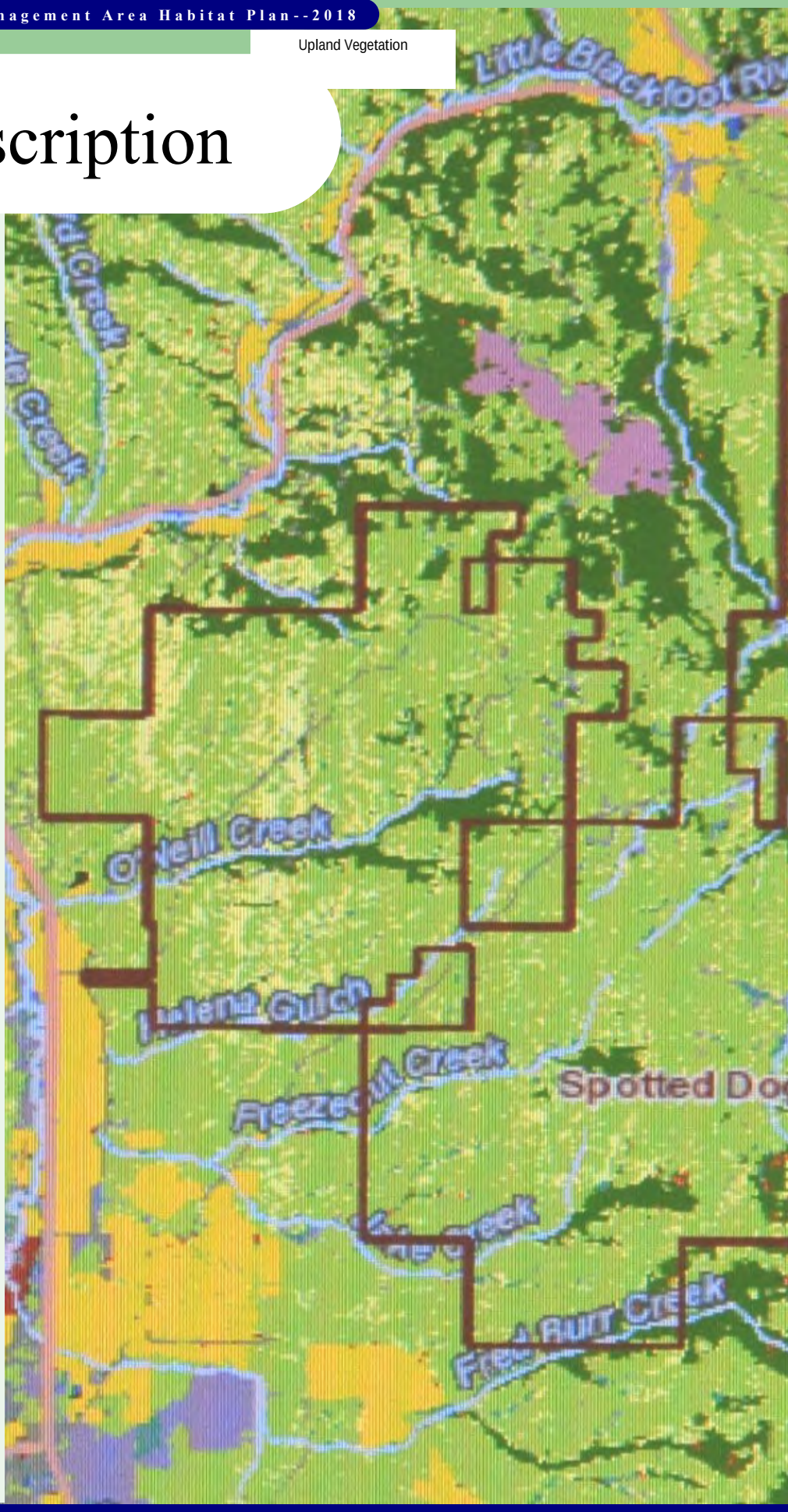
Area Description

This is an image copied from the FWP Mapper on the FWP Internal Website, showing Level 2 Landcover (2016). The outer boundary of the Wildlife Management Area (WMA) is shown with a heavy, dark line, including FWP deeded lands and DNRC lands leased by FWP. Check marks are provided on the legend to indicate the landcover types that apply to this particular landscape. Level 3 Landcover—a finer delineation of landcover—was available, but we chose Level 2 as the best scale of differentiation for revealing broad aggregations of similar landcover types across the WMA.

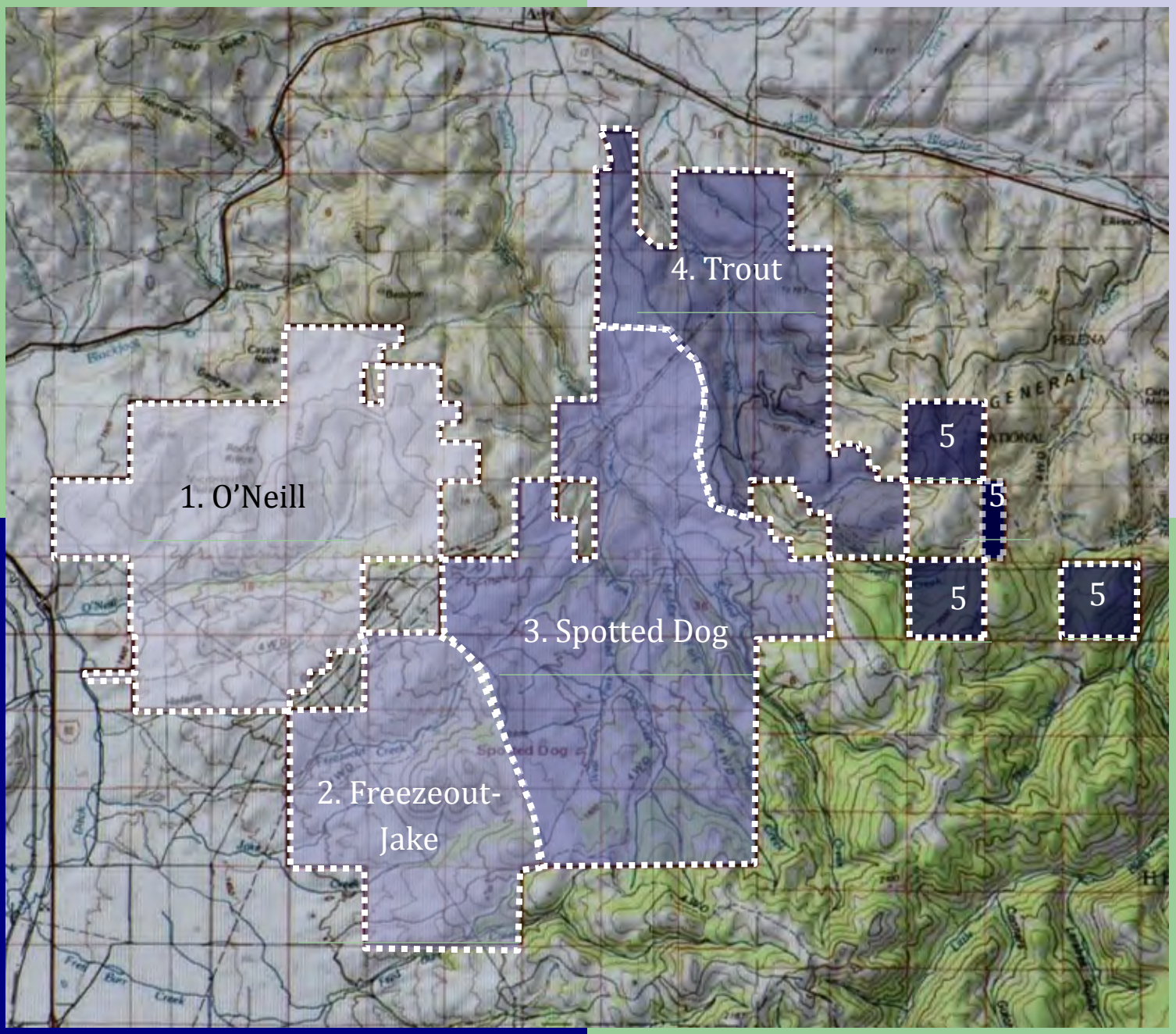
Due to their relatively small and scattered landscape coverage, aspen stands, riparian areas and wetlands are not distinguishable within the dominant landcover classes at this map scale.

This map locates the densest aggregation of bitterbrush in the northwest quarter of the WMA, suggesting shallower soils and a drier moisture regime than in the montane grassland that dominates the central portion of the WMA. The multiple stream courses of Spotted Dog Creek stand out as an aggregation of habitat diversity. The distribution of forest and harvested forest stands is apparent.

Lands deeded to FWP have been previously described as 14,049 acres (51%) of native grasslands; 2,717 acres ((10%) of shrub grasslands; 1,938 acres (7%) of meadows, marsh and riparian woodlands; 4,159 acres (15%) of coniferous forests; and at least 42 miles of streams and riparian habitats.




Level2_Landcover_2016
Agriculture
Alpine Grassland and Shrubland
Alpine Sparse and Barren
Bluff, Badland and Dune
Bog or Fen
Cliff, Canyon and Talus
Conifer-dominated forest and woodland (mesic-wet)
Conifer-dominated forest and woodland (xeric-mesic)
Deciduous dominated forest and woodland
Deciduous Shrubland
Depressional Wetland
Developed
Floodplain and Riparian
Forested Marsh
Harvested Forest
Herbaceous Marsh
Insect-Killed Forest
Introduced Vegetation
Lowland/Prairie Grassland
Mining and Resource Extraction
Mixed deciduous/coniferous forest and woodland
Montane Grassland
Open Water
Recently burned
Sagebrush Steppe
Sagebrush-Shrubland
Scrub and Dwarf Shrubland
Wet meadow
Highways
Lakes Streams
Note: This type denotes bitterbrush here, not sagebrush.
Hurd Creek
Elliston Creek
Trout Creek
Spotted Dog
South Fork Spotted Dog
Hat Creek
Caribou



Management Unit 1: O'Neill Creek

Management Unit 2: Freezeout-Jake Creeks

Management Unit 3: Spotted Dog Creek

Management Unit 4: Trout Creek

Management Unit 5: Forested Checkerboard

Management Units, consisting of properties deeded to Montana Fish, Wildlife & Parks (FWP) and State Trust Lands leased by FWP and managed by the Montana Department of Natural Resources and Conservation (DNRC).

N: LAND USE & MANAGEMENT UNITS

Land Use

The property now known as Spotted Dog WMA has a long history of ranching, involving cattle and in earlier years, sheep. Under the purchase agreement (dated July 28, 2010) by which FWP acquired the WMA property from the Rock Creek Cattle Company (RCCC), it was agreed that RCCC would retain limited grazing rights on the WMA through December 31, 2012. At the request of RCCC, the Montana Fish, Wildlife & Parks Commission subsequently extended that grazing agreement through 2013. From 2014 forward, FWP has provided rest from livestock grazing as outlined in its Management Plan and the Livestock Grazing Amendments to the Plan contained in the Decision Notice for the purchase of Spotted Dog WMA (August 2010). Livestock trespass continues across the WMA's unfenced boundary with the Helena National Forest.

Management Units

We divided the Wildlife Management Area (WMA) into five descriptive Management Units (MU). Each MU generally corresponds with one principal drainage system and access route, MU5 being somewhat the exception to this rule.

The five MUs generally represent distinct regimes of vegetation types and terrestrial species richness at a gross scale. The O'Neill Creek MU is generally the driest and least diverse landscape on the WMA, followed by the Freezeout-Jake Creek MU. The Spotted Dog Creek MU might rank highest in overall terrestrial species richness by virtue of its relative abundance and quality of riparian and wetland habitats. The Trout Creek MU steps down slightly in terrestrial species richness because of its lesser habitat complexity, compared with the Spotted Dog Creek MU. The Forested Checkerboard MU lies in the highest moisture regime of the WMA and is unique in its coverage of coniferous forest habitat types.

Two MUs also represent relatively distinct aggregations of historic land uses and "ecological health" (Hansen et al. 2015). The O'Neill Creek MU is a portion of the historic ranching operations where cattle were turned out in the spring and where they gathered in the fall; this coupled with the inherently harsh sites and effects of repeated winter use by elk resulted in relatively low ecological health on the uplands. Similarly, the Forested Checkerboard MU was heavily logged by R-Y Timber just prior to the sale of the property to FWP. The Freezeout-Jake, Spotted Dog and Trout Creek MUs were broadly similar to each other in the variety and scatter of "Healthy," "Healthy, but with Problems," and "Unhealthy" habitats, and overall these MUs could be characterized as having better ecological health—with some obvious exceptions—than the O'Neill Creek or Forested Checkerboard MUs (Hansen et al. 2015).

From an operational perspective, the MUs require differing levels and kinds of management. The O'Neill Creek MU contains the primary public access point to the WMA from the Deer Lodge side of the property, via Freezeout Lane, includes the Rocky Ridge communications site and the BPA 500-KV powerline, and is bordered by a residential area along Beck Hill Road. The O'Neill Creek and Freezeout-Jake MUs share boundaries with private ranches that occur along the Old Stagecoach county road, which has been closed to public access in recent decades. Similarly, public access to the Freezeout-Jake MU is currently closed where the road crosses private land before reaching the WMA. The Spotted Dog MU also shares boundaries with private ranches along the track of the Old Stagecoach Road, and includes the Old Pauly Place, as well as Spotted Dog Reservoir. Public access to the WMA from Avon originates in the Trout Creek MU, with the open public road system crossing into the Spotted Dog Creek MU. A groomed snowmobile route runs across the Trout Creek and Forested Checkerboard MUs from Avon to Elliston. The Forested Checkerboard MU and part of the Trout Creek MU are unfenced against an active livestock allotment on the Helena National Forest. Whereas the other MUs will be managed as parts of a larger rangeland and riparian landscape, the Forested Checkerboard MU will be managed as parts of the larger coniferous forest.

Following are more detailed maps and descriptions of each MU.

AREA DESCRIP

PTION: MU-1 (O'NEILL CREEK)

Location

The O'Neill Creek Management Unit (MU-1) is located in the northwest corner of the Spotted Dog WMA and corresponds with the WMA property boundaries that most closely circumscribe the O'Neill Creek watershed. A short length (~0.2 mile) of the MU-1 southeast boundary is arbitrarily drawn across a narrow passage of FWP deeded and leased land between two private parcels; this narrow passage legally connects MU-1 with MU-2, crossing the ridge between Helena Gulch and a tributary of Freezeout Creek. MU-1 alone covers roughly 11,000 acres, or about 30% of the WMA.

Landmarks

Rocky Ridge is a prominent topographic feature, north of O'Neill Creek, where communications towers and facilities are visible from Beck Hill Road and elsewhere along the WMA perimeter. A dotted black line on the map highlights the BPA 500 KV powerline, which also serves as a prominent landmark.

Access

The only designated public access point on the west boundary of the WMA is located near the southwest corner of MU-1, along Freezeout Lane, which provides seasonally open road access upon the WMA for the public, and administrative access as needed for FWP and DNRC. Solid green lines denote the seasonally open road system (ca 2017), amounting to roughly 5.5 miles of open roads in MU-1.

Structures

FWP inherited a barn with its acquisition of the WMA, located along the open road, just south of where the road crosses O'Neill Creek.

Fences

Since acquisition, FWP has constructed about 13 miles of new boundary fence, in locations shown by the heavy, blue-highlighted line around the west half of MU-1.

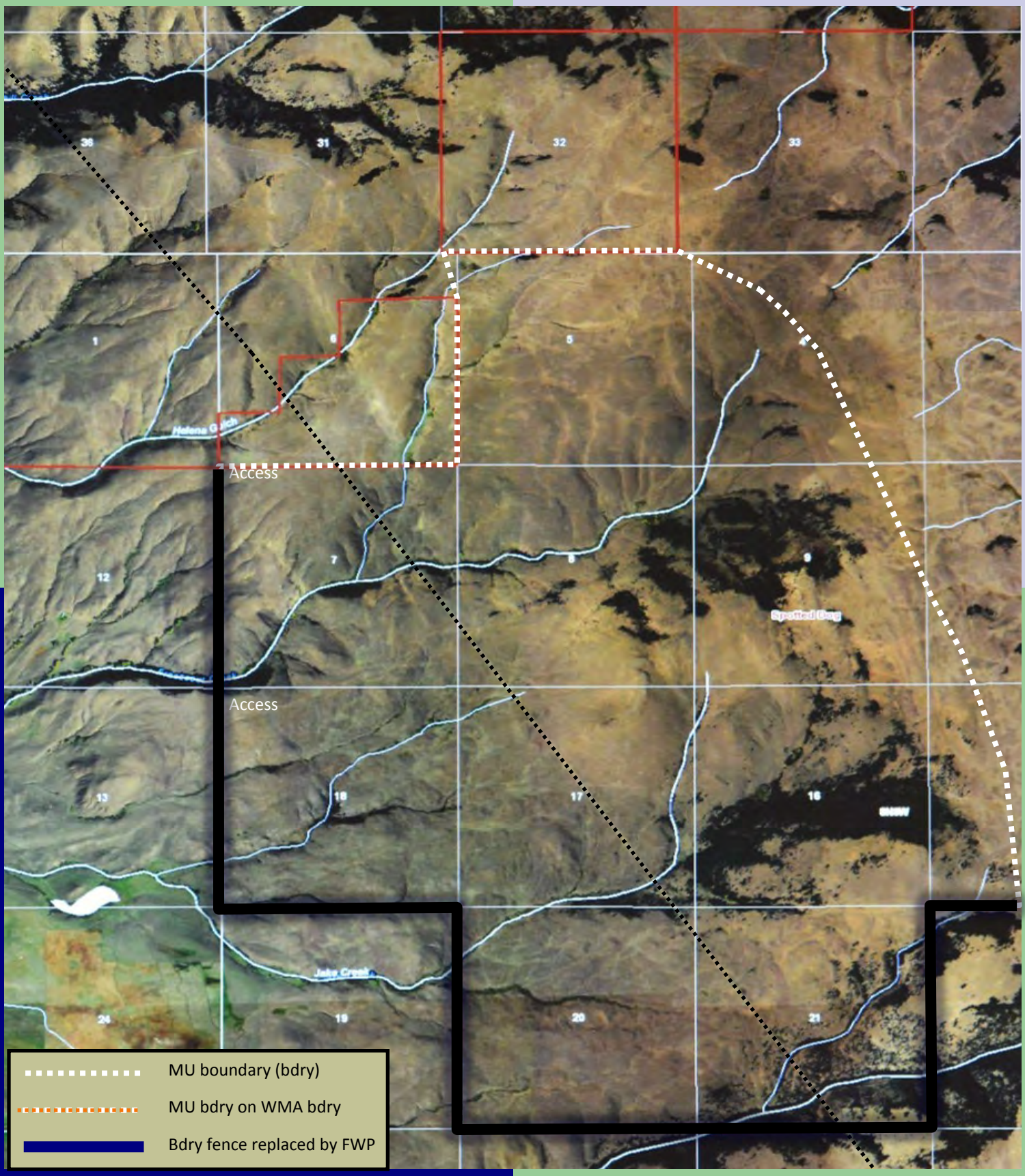
Ecological Health Assessment

Hansen et al. (2015) sampled 4 polygons covering 1.84 stream miles of O'Neill Creek, involving 14.79 acres, and rated them as "Healthy, but with Problems," on the whole. One wetland was sampled in MU-1 and was found to be "Unhealthy." Of 19 grassland sites sampled in MU-3, most (1) were rated "Healthy, but with Problems," 5 were rated "Healthy," and the only 3 Unhealthy"-rated grassland sites on the WMA were found in western MU-1. Five of 8 shrubland sites that were sampled in MU-1 were rated as "Healthy, but with Problems," and as with the grassland sample, 3 "Unhealthy"-rated shrublands were found in the western portion of MU-1. Two of 3 coniferous forested sites in MU-1 were rated "Healthy, but with Problems," and the other was rated, "Unhealthy."

Invasive Plant Species

Hansen et al. (2015) found that 51% of the 35 sites sampled in MU-1 had greater than 10% canopy cover of invasive species.

AREA DESCRIPTIO



N: MU-2 (FREEZEOUT-JAKE CREEKS)

Location

The Freezeout-Jake Creeks Management Unit (MU-2) is located in the southwest corner of the Spotted Dog WMA and corresponds with the WMA property boundaries that most closely circumscribe the Freezeout Creek, Jake Creek and Fred Burr Creek watersheds. A short length (~0.2 mile) of the MU-2 north boundary is arbitrarily drawn across a narrow passage of FWP deeded and leased land between two private parcels; this narrow passage legally connects MU-1 with MU-2, crossing the ridge between Helena Gulch and a tributary of Freezeout Creek. Slightly more than a 3-mile stretch of the eastern MU-2 boundary is arbitrarily drawn along the divide that separates the Spotted Dog Creek watershed from the Freezeout, Jake and Fred Burr watersheds. MU-2 covers roughly 6,000 acres, or about 16% of the WMA.

Landmarks

A dotted black line on the map highlights the BPA 500 KV powerline, which is a prominent landmark in MU-2.

Access

Two potential public access points exist on the west boundary of MU-2, though neither is open and available to the public at this time. Both access points stem from forks of Jake Creek Road, near Deer Lodge. The northernmost potential access point is on Jake Creek Road proper, more or less following the Old Stagecoach county road, and crosses a short distance of the MU-2 west boundary in the NWNW corner of Section 7 (T8N, R8W), and the north boundary of MU-2 in the NWNW corner of Section 5 (T8N, R8W). This road serves as the ranch road for the private parcels along the north boundary of MU-2.

The southernmost potential access point is commonly referred to as the Jake Creek access, although it enters the WMA on an unnamed fork of the Jake Creek Road. While Jake Creek Road is a county road, this unnamed fork is a private road that has been closed for the past few years on private land, beyond which the landowner currently prohibits the public from continuing toward the WMA. This access to the WMA was open to the public in the first years of FWP ownership at the pleasure of the preceding private landowner. The road enters the MU-2 west boundary just south of Freezeout Creek in the NWNW corner of Section 18 (T8N, R8W). Both access points are marked on the map.

Structures

There are no structures of note in MU-2.

Fences

Since acquisition, FWP has constructed about 7.5 miles of new boundary fence, in locations shown by the heavy, blue-highlighted line around the west and south boundaries of MU-2.

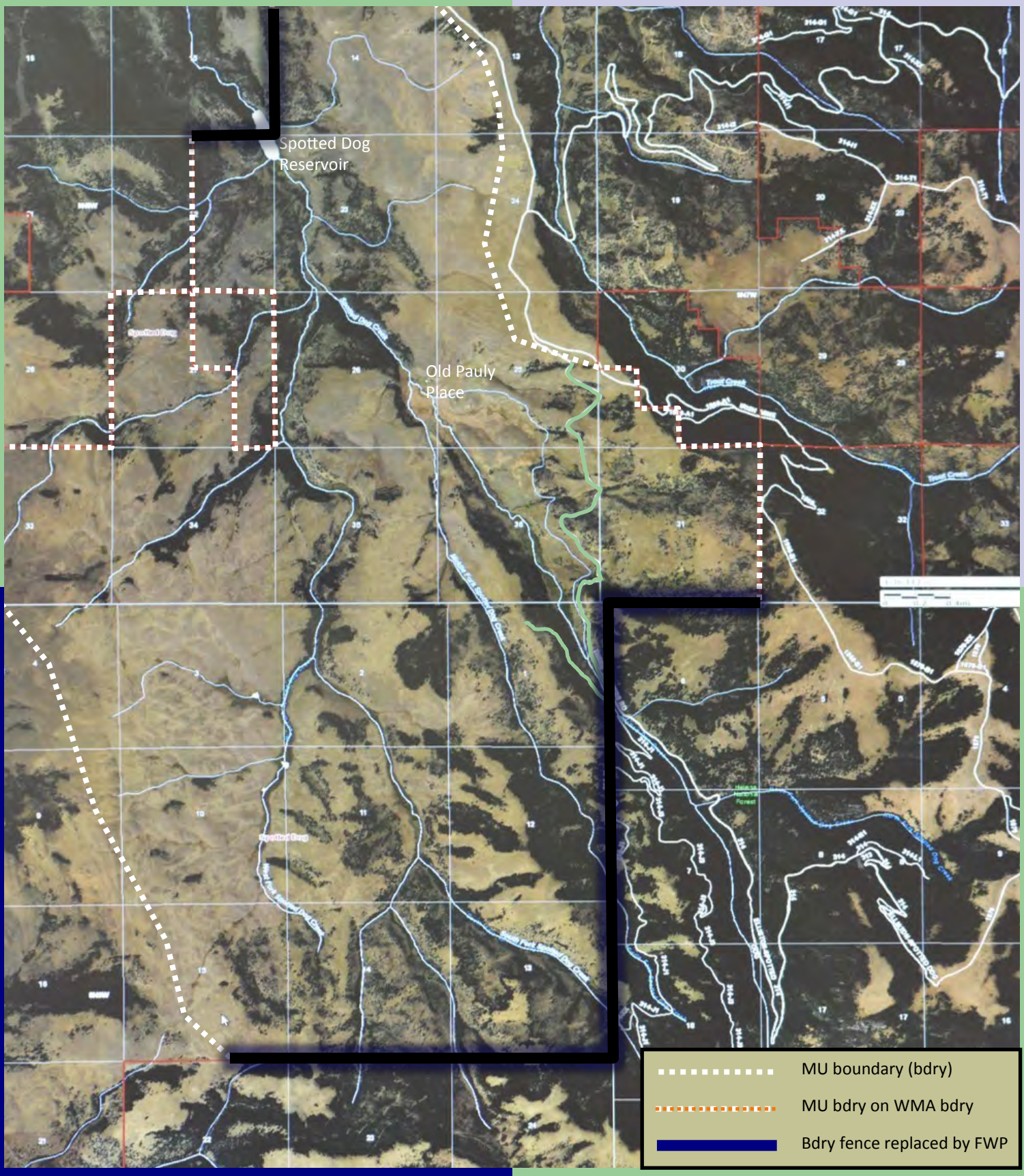
Ecological Health Assessment

Hansen et al. (2015) rated the streams in MU-2 as "Healthy, but with Problems," overall. They sampled 3 polygons covering 1.83 stream miles and 8.81 acres on Freezeout Creek; 6 polygons covering 3.00 stream miles and 17.10 acres on Jake Creek; and 2 polygons covering 2.20 stream miles and 11.82 acres on Fred Burr Creek. One wetland was sampled in MU-2 and was found to be "Healthy, but with Problems." Of 9 grassland sites sampled in MU-2, most (6) were rated "Healthy," and 3 were "Healthy, but with Problems." Three of 4 shrubland sites sampled in MU-2 were rated "Healthy," and one was "Healthy, but with Problems." One of 2 coniferous forested sites in MU-2 was rated "Healthy" and the other was "Healthy, but with Problems."

Invasive Plant Species

Hansen et al. (2015) found that 31% of the 26 sites sampled in MU-2 had greater than 10% canopy cover of invasive species.

AREA DESCRIPTI



ON: MU-3 (SPOTTED DOG CREEK)

Location

The Spotted Dog Creek Management Unit (MU-3) is the heart of the Spotted Dog property, spanning from the southeast quarter of the WMA to its north boundary, and corresponds with the WMA property boundaries that most closely circumscribe the Spotted Dog Creek watershed. Slightly more than a 3-mile stretch of the western MU-3 boundary is arbitrarily drawn along the divide separating the Spotted Dog Creek watershed from the Freezeout, Jake and Fred Burr watersheds. Six-or-so miles of the MU-3 eastern boundary is arbitrarily drawn along the divide that separates the Spotted Dog Creek watershed from the Trout Creek watershed. MU-3 covers roughly 12,000 acres, or about 32% of the WMA.

Landmarks

Spotted Dog Reservoir (16 acres) spans both sides of the irregular north boundary of the WMA, where Spotted Dog Creek leaves FWP deeded land onto the Cross Canyon Ranch.

Access

External points of public vehicular access originate in the Trout Creek Management Unit (MU-4) and are identified in that portion of the plan. Seasonally open roads stemming from access points that originate in MU-4 are shown in solid green lines on the map, amounting to roughly 3 miles of open roads in MU-3.

Structures

The old Pauly Place consists of a modular home and outbuildings, all unlivable and without material value. The buildings are set alongside an abandoned hayfield of approximately 30 acres.

Fences

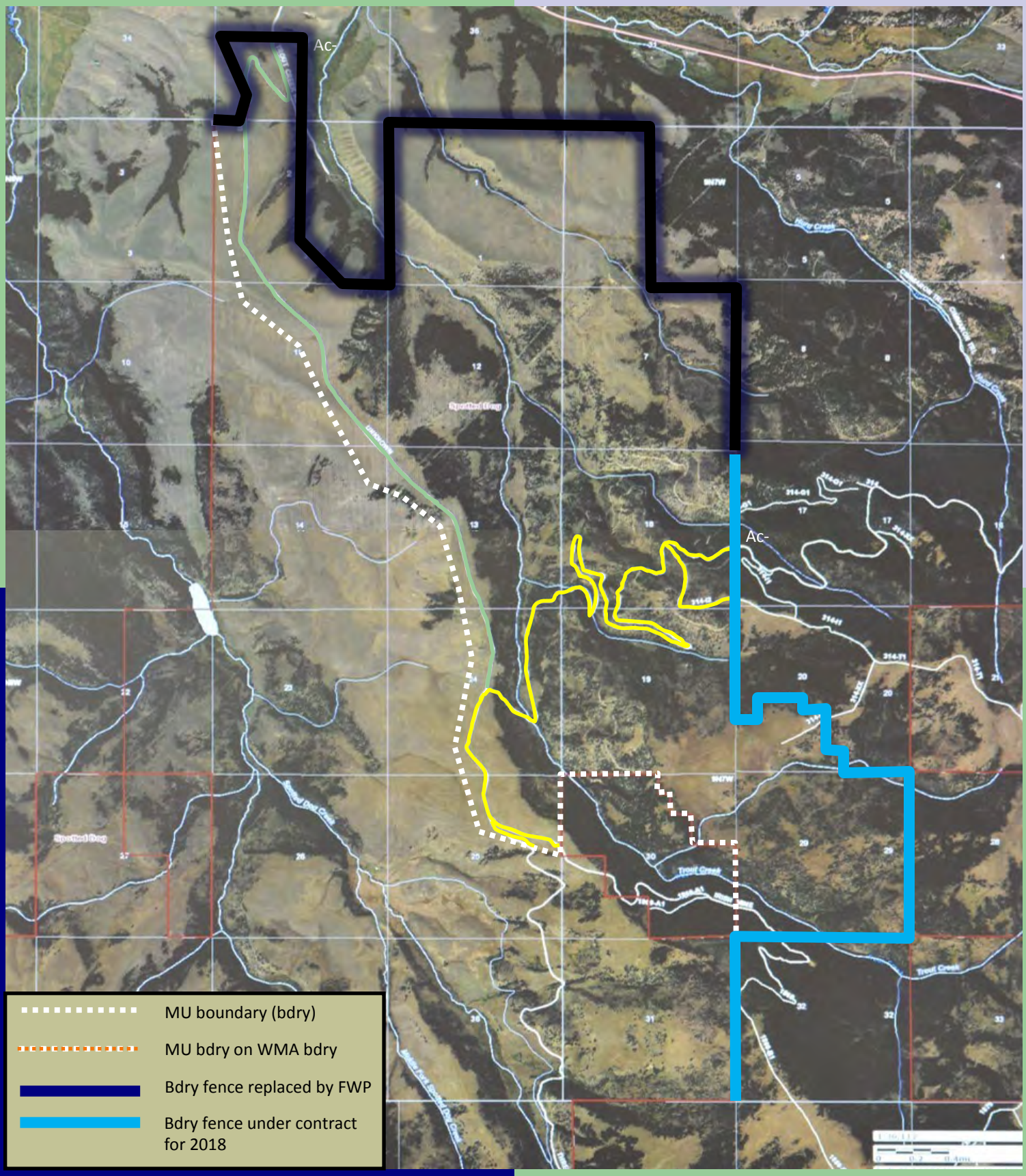
Since acquisition, FWP has constructed about 8 miles of new boundary fence around MU-3, in locations shown by the heavy, blue-highlighted line around the south, east and west property boundaries.

Ecological Health Assessment

Hansen et al. (2015) sampled 28 polygons covering 19.84 stream miles of Spotted Dog Creek, involving 361.17 acres, and rated them as "Healthy, but with Problems," on the whole. Each of 3 wetlands sampled in MU-3 was found to be "Healthy, but with Problems." Of 35 grassland sites sampled in MU-3, most (20) were rated "Healthy, but with Problems." Fifteen (15) other grassland sites were rated "Healthy." No "Unhealthy" sites were found in the grassland samples in MU-3. Most (14) of the 17 forest types sampled in MU-2 were rated "Healthy, but with Problems," and 3 were rated "Unhealthy." Two aspen sites were rated as Healthy, but with Problems" and one was "Healthy." No significant shrubland component occurs in MU-3.

Invasive Plant Species

Hansen et al. (2015) found that 21% of the 85 sites sampled in MU-3 had greater than 10% canopy cover of invasive species.


Ac-
Ac-
MU boundary (bdry)
MU bdry on WMA bdry
Bdry fence replaced by FWP
Bdry fence under contract for 2018

PTION: MU-4 (TROUT CREEK)

Location

The Trout Creek Management Unit (MU-4) lies in the northeast corner of the Spotted Dog WMA, and corresponds with the WMA property boundaries that most closely circumscribe the Trout Creek watershed. Six-or-so miles of the MU-4 western boundary is arbitrarily drawn along the divide that separates the Trout Creek watershed from the Spotted Dog Creek watershed. MU-4 covers roughly 6,000 acres, or about 16% of the WMA.

Landmarks

Arguably, the deeply channelized canyon through which Trout Creek flows is the most prominent landmark in MU-4.

Access

Two points of public vehicular access occur in MU-4. Both originate from U. S. Route 12. One (Trout Creek access) crosses a bridge over the Little Blackfoot River at Avon, and the other follows Forest Service Road 314, beginning at Elliston. The seasonally open road system stemming from access points that originate in MU-4 are shown in solid green lines. The open road system that is also part of a groomed snowmobile route, providing passage for over-the-snow vehicles across Spotted Dog WMA, is shown on the map in yellow.

Structures

No notable structures occur in MU-4.

Fences

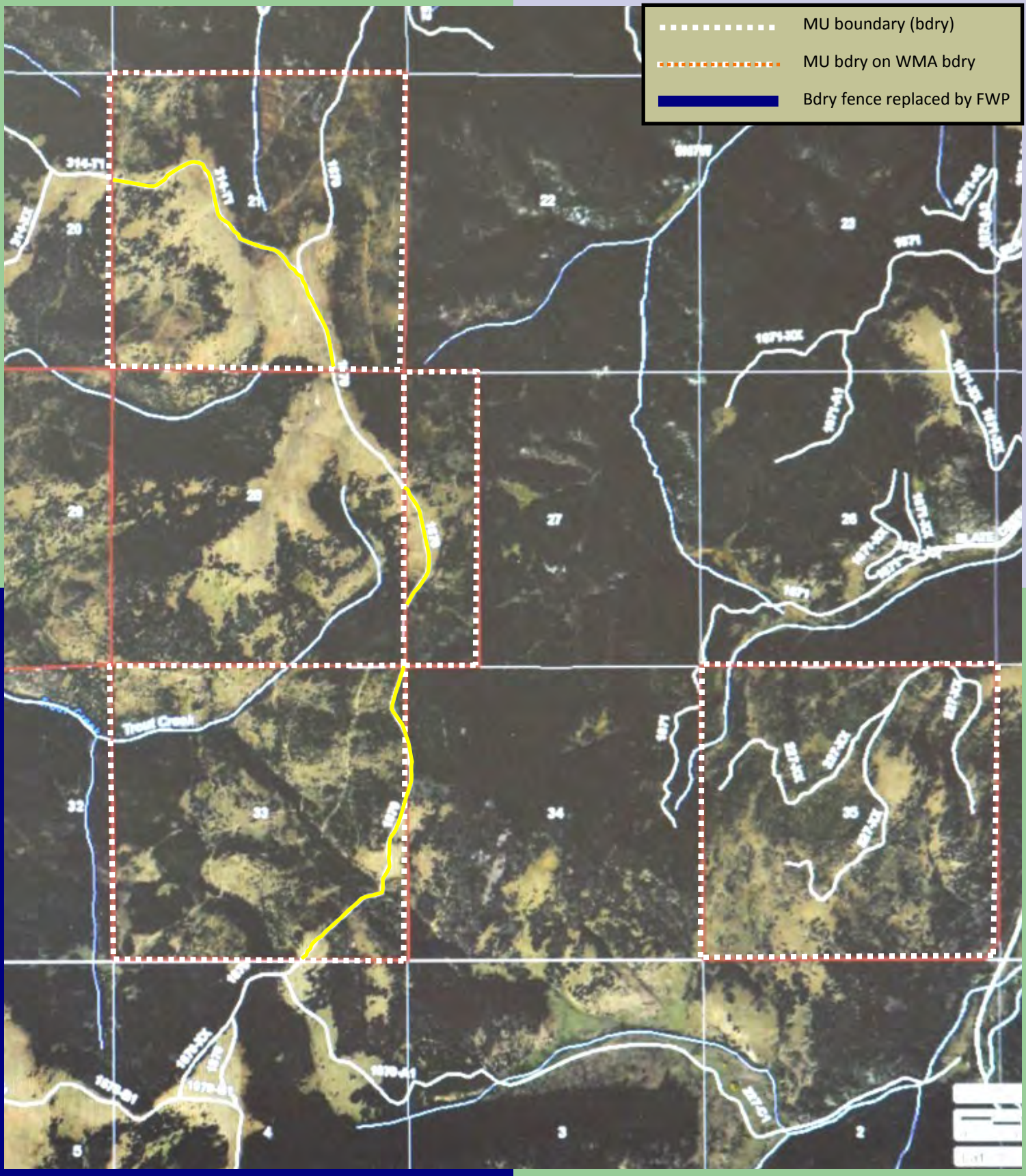
Since acquisition, FWP has constructed about 8 miles of new boundary fence around MU-4, in locations shown by the heavy, blue-highlighted line around the north and northeast property boundaries. The remainder of the WMA boundary in MU-4, in large part adjoining the active livestock allotments on the Helena National Forest, is unfenced. However, the boundary fence around MU-4 is under contract for completion in Spring 2018 (shown at left).

Ecological Health Assessment

Hansen et al. (2015) sampled 12 polygons covering 7.38 stream miles of Trout Creek, involving 56.30 acres, and rated them as "Unhealthy," on the whole. Two wetlands sampled in MU-4 were found to be "Healthy," a third one was rated "Healthy, but with Problems," and a fourth one was rated "Unhealthy." Of 19 grassland sites sampled in MU-4, 16 were rated "Healthy," and the other 3 sites were "Healthy, but with Problems." In fact, 7 grassland sites received perfect scores for ecological health; these sites in the northernmost parcels of MU-4 represented the most ecologically intact grasslands on Spotted Dog WMA. No "Unhealthy" sites were found in the grassland samples in MU-4. Most (6) of the 7 coniferous forest types sampled in MU-4 were rated "Healthy, but with Problems," and 1 was rated "Unhealthy." Aspen and shrubland sites were not significantly present in MU-4.

Invasive Plant Species

Hansen et al. (2015) found that 26% of the 42 sites sampled in MU-4 had greater than 10% canopy cover of invasive species.


MU boundary (bdry)
MU bdry on WMA bdry
Bdry fence replaced by FWP
Trout Creek

N: MU-5 (FORESTED CHECKERBOARD)

Location

The Forested Checkerboard Management Unit (MU-5) is the easternmost extension of the Spotted Dog WMA, and corresponds with the WMA property boundaries that are inholdings within the Helena National Forest.

MU-5 covers roughly 2,000 acres, or about 5% of the WMA.

Landmarks

There are no major landmarks in MU-5.

Access

MU-5 is crossed by the Forest Service road to Irish Mine, which is part of a groomed snowmobile route that provides passage for over-the-snow vehicles. This route is highlighted on the map in yellow.

Structures

No notable structures occur in MU-5.

Fences

MU-5 is unfenced within an active Forest Service livestock grazing allotment.

Ecological Health Assessment

Hansen et al. (2015) did not sample any sites in MU-5. The vegetation in MU-5 may be generalized as historically harvested coniferous forest.

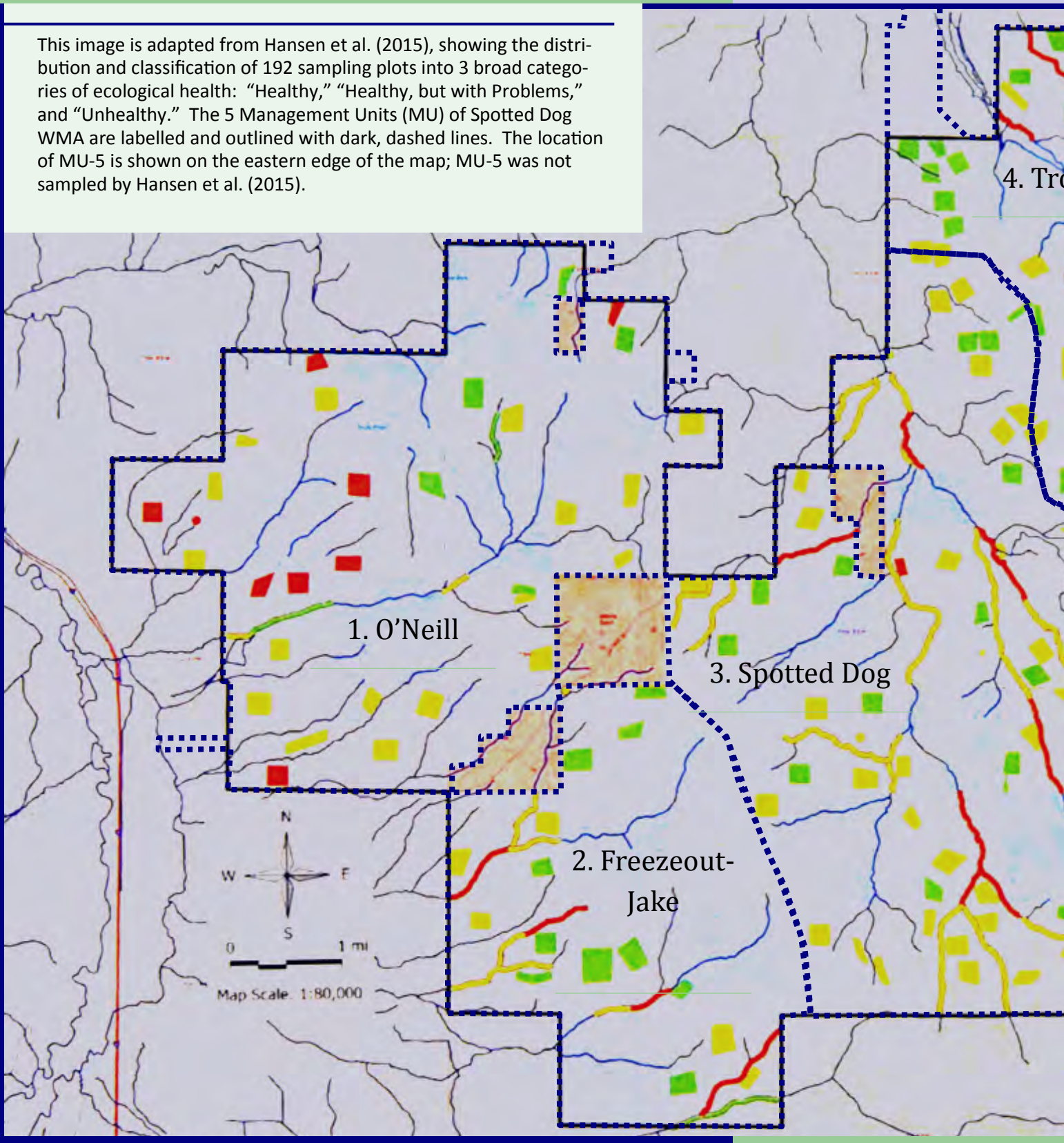
Invasive Plant Species

Hansen et al. (2015) did not sample any sites in MU-5.

Example of cutover forest on FWP land in Spotted Dog WMA.

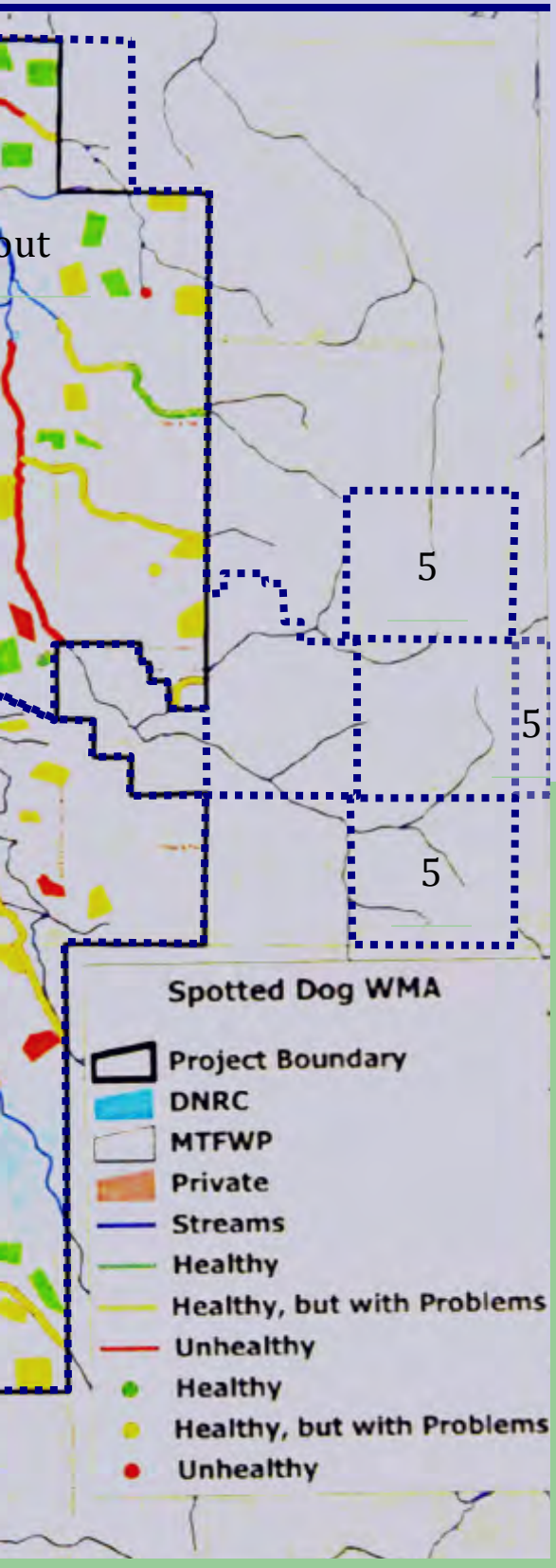
Adapted from: Hansen, P.L., W.H. Thompson, M. Thompson, J. Anderson, R. Fox, and T. Keith

This image is adapted from Hansen et al. (2015), showing the distribution and classification of 192 sampling plots into 3 broad categories of ecological health: "Healthy," "Healthy, but with Problems," and "Unhealthy." The 5 Management Units (MU) of Spotted Dog WMA are labelled and outlined with dark, dashed lines. The location of MU-5 is shown on the eastern edge of the map; MU-5 was not sampled by Hansen et al. (2015).



ENTORY & HEALTH ASSESSMENT

n. 2015. *Ecological Inventory and Health Assessment of Spotted Dog WMA.*



Hansen et. al. (2015) characterized the soil, water and vegetation resources of FWP deeded and leased (from DNRC) lands across 90% of Spotted Dog WMA, as depicted by the solid black boundary and scatter of sampling plots on the map. Hansen et al. underestimated the contribution of coniferous forest on Spotted Dog WMA by omitting MU-5 and part of MU-4.

With regard to the 90 percent of the WMA that Hansen et al. sampled:

Lifeform	Coverage	Overall Weighted Average Health Score
Grassland	62%	79%
Coniferous Forest	22%	68%
Shrubland	13%	70%
Riparian	2%	62%
Aspen Woodland	<1%	76%
Wetland	<1%	64%

Upland grasslands are in the best condition on Spotted Dog WMA, and the best of the best is concentrated in the northernmost sections of MU-4. Conversely the problem area for upland grasslands, as well as for shrubland and wetland environments on the WMA is in western MU-1. MU-1 had the highest proportion of sampling plots (51%) with >10% coverage of invasive species, followed by MU-2 (31%), MU-4 (26%) and MU-3 (21%).

Despite the unhealthy and non-functional condition of some uplands in MU-1, O'Neill Creek ranked highest among streams in ecological condition, with an overall health rating of 79%. The MU-2 streams came second in order of ecological condition, with Fred Burr Creek at 74%, Freezeout Creek at 65% and Jake Creek at 61%. MU-3 followed with Spotted Dog Creek at 62%. Trout Creek, in MU-4, ranked last in stream health (54%), among the most intact upland grasslands on the WMA.

Overall, riparian and wetland habitats are the most impacted vegetation communities on the WMA.

As a gross generalization, restoration-scale effort will be required to address the ecological problem areas of the MU-1 uplands and the MU-4 riparian and wetlands. Conversely, vegetation communities in MU-2 and MU-3 show the greatest potential for responding to moderate adjustments in management.

From a conservation perspective, Hansen et al. (2015) identified bluebunch wheatgrass, Idaho fescue, rough fescue, bitterbrush and aspen as species of beneficial ecological importance, and cheatgrass as an agent of ecological disruption.

Management Direction:

Hansen et al. (2015) contributed careful notations as to the locations of fixed plots that could be found and remeasured in the future to assess changes in streams and vegetation over time. Their methodologies are detailed in Appendix F of their 2015 report. Repeating these methods and visiting all of the original plots would require specific expertise and a large time commitment, which may not be available within FWP; therefore, replication of Hansen et al. (2015) may require FWP to contract with a qualified outside source, or select only a subset of plots and/or methods to replicate.

Most importantly, this informs future managers that this baseline of ecological inventory and assessment exists, and provides a repeatable method and opportunity to assess whether this Habitat Plan is achieving its goals in the future. This type of monitoring would be most appropriately accomplished at relatively long intervals—e.g., every 5-10 years—in order to give the land a chance to heal or express the changes that require several growing seasons to become apparent and measurable. Photo points will be established to monitor representative habitats that are featured in this plan at more frequent intervals between replicates of the Ecological Inventory and Health Assessment.

Another need for monitoring is to check for compliance with the prescription while treatments are occurring.

Figures from Hansen et al. (2015), which illustrate some of the methods they used to inventory the WMA.

Photo 65. An example of the introduced invasive species *Carduus nutans* (nodding plumeless thistle), which was observed on over half of all inventoried polygons across the WMA (2014 photo)

Base Budget Items and Work Priorities:

- Prepare an annual activities report.
- Continue wildlife surveys according to regional information needs and priorities.
- Monitor contracted fence construction, cooperative livestock grazing, forest management and other activities as they occur to check for compliance and identify

Monitoring

Is the forest management contractor operating in the correct cutting unit and leaving the right trees as prescribed? Are the cattle in the right pasture and is the grass resource sustaining the grazing pressure as anticipated? Is the boundary fence being constructed on line and are the wires spaced as prescribed? These are examples of situations and questions that will require FWP to work with contractors and cooperators in the field while operations are underway, and to hear and identify issues as they arise. Monitoring of this nature will require FWP to budget for such time and effort in conjunction with its consideration of whether treatments are cost-effective and needed. In other words, such monitoring should not be optional, and must be considered as a cost of doing business.

Some or all of these methods could be repeated in the future to monitor the effects of this Plan.

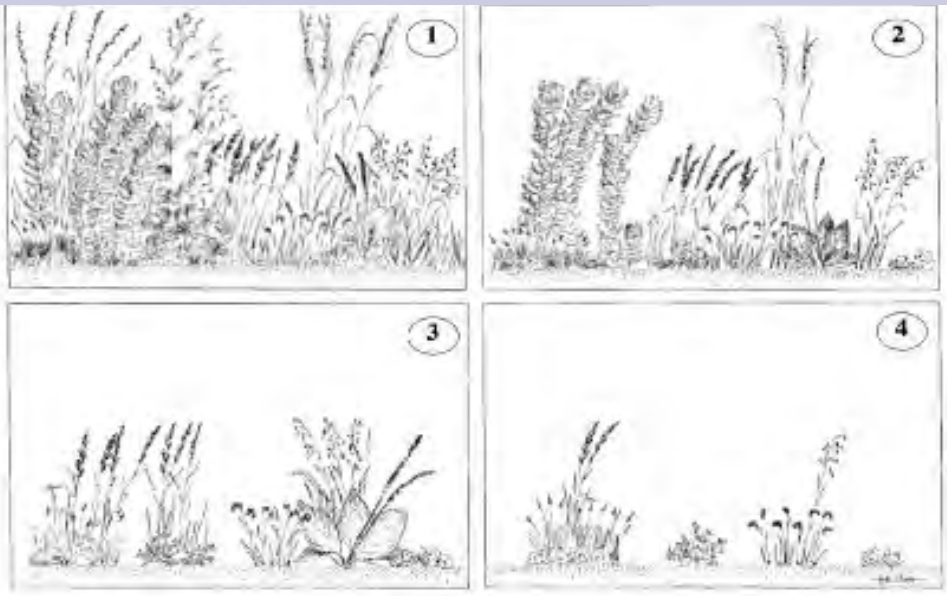


Figure 4. Example illustration of structural change to grassland plant community as disturbance level increases. 1) All expected structural layers well represented; 2) Tall grasses and forbs significantly reduced; 3) Tall grasses and forbs layer absent, and mid height layer reduced; 4) Community reduced to only low grasses and forbs. ***NOTE:*** *Not all grassland sites will look like this figure or have the same site potential. The user needs to refer to an appropriate ecological site or habitat type/community type description for information about successional stages.* (figure adapted from Adams and others [2003]

FWP schedules surveys of fish and wildlife populations according to regional needs for information to manage those resources broadly. This may result in annual surveys of population trend, as in aerial elk surveys for Hunting District 215. Or it may result in periodic surveys of fisheries in certain streams. Exploratory inventories of bird diversity, small mammals, bats and other wildlife may occur on an occasional basis.

Monitoring of fish and wildlife populations, if devised specific to the outcomes of this Habitat Plan, would likely be designed on a case-by-case basis to measure effects across a landscape larger than the WMA alone, owing to direction in this Plan that management of the WMA should benefit fish and wildlife widely, not only on the WMA.

adjustments needed.

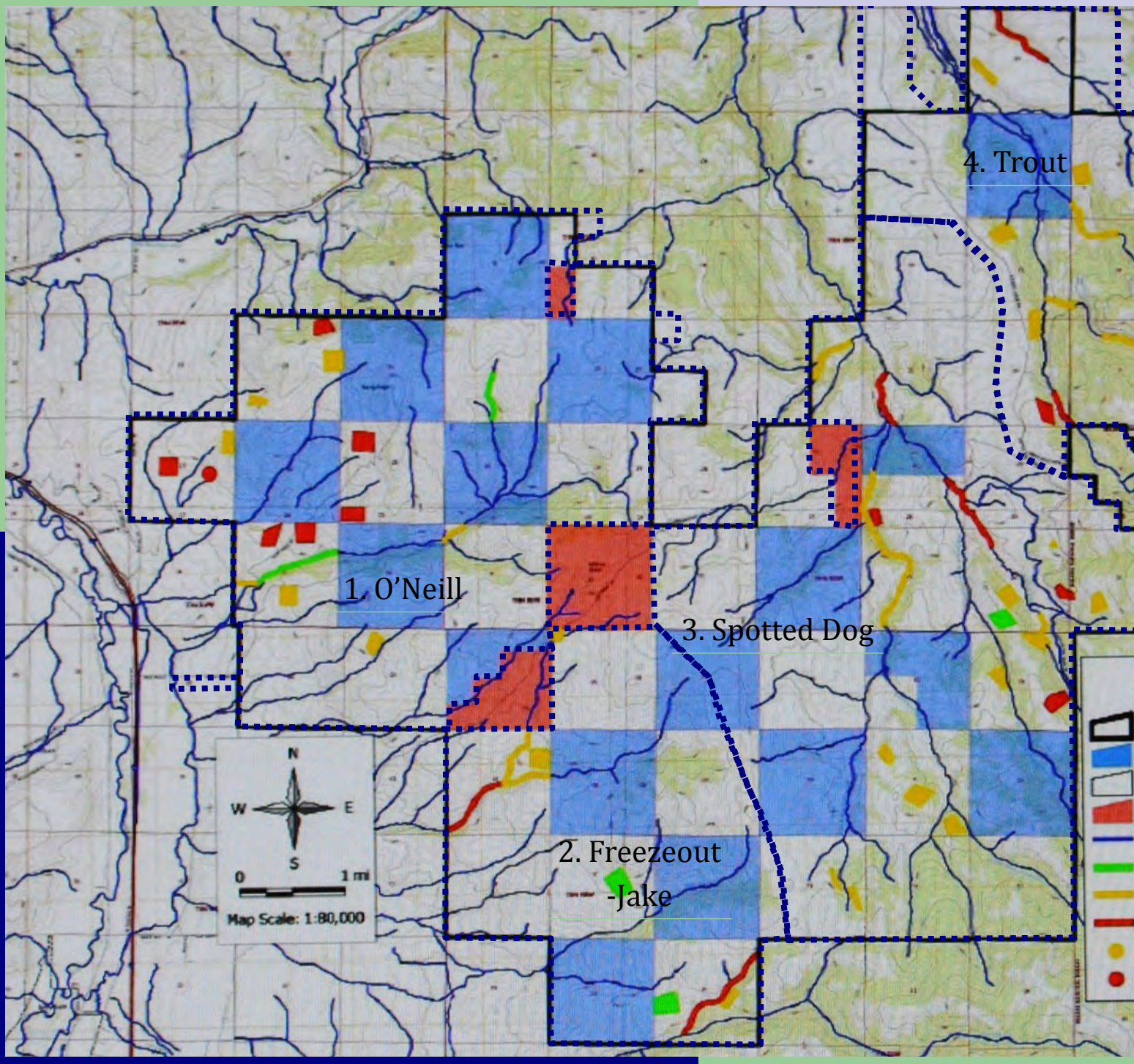
- Establish photo points to regularly monitor representative habitats that are featured in this plan.

Priorities for Special Projects when Feasible:

- Replicate all or portions of the ecological inventory and assessment by Hansen et al. (2015) by 2025, and at 10-year intervals thereafter.

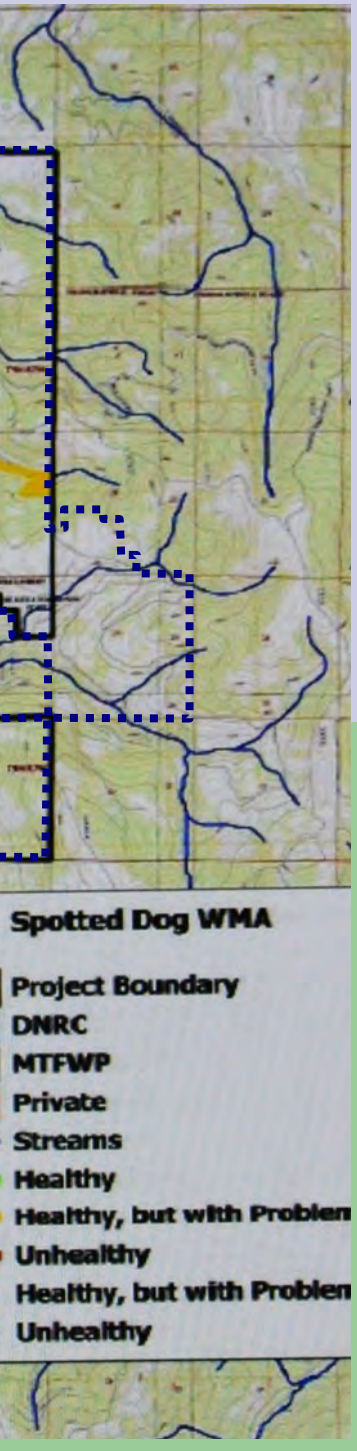
Management Direction:

Hansen et al. 2015. Page 152, Figure 32: Locations of 55 plots (of 192 total) with weed cover >10 %.



Invasive Plants

Hansen et al. (2015) defined invasive plants as "introduced species whose introduction does, or is likely to cause environmental harm. The official Montana Noxious Weed List (current as of 2013) was used, augmented by additional species considered noxious weeds by Powell County, Montana."



Invasive plant species are widely present, but somewhat localized where their canopy coverage is highest, as seen on this map.

In MU-1 (O'Neill), the issue seems to be seen along the length of O'Neill Creek, as well as on the uplands in the western half of MU-1. MU-1 appears to be the location where weeds in the uplands are a matter of greatest concern.

MU-2 (Freeezeout-Jake) shows a weed distribution pattern similar to MU-1, but at much lower intensity in the uplands than in MU-1.

MU-3 (Spotted Dog), when viewed in combination with MU-2, shows an area of relatively low weed occurrence in the uplands, following both sides of the divide between MU-2 and MU-3. This suggests a large location to defend against further weed establishment and spread, especially considering the bitterroot and other native flowering plants on these sites.

Generally speaking, weeds in MU-3 appear to be concentrated and common throughout the mainstem and tributaries of Spotted Dog Creek, posing a difficult challenge for containment and management. The first priority will be to allow natives an improved competitive advantage by reducing grazing impacts.

MU-4 (Trout Creek) appears to be similar to MU-3 in that locations of the greatest weed concentrations appear to be closely tied to the stream bottoms. Uplands in MU-4 represent sites of highest priority to protect from weed establishment and spread.

Hansen et al. (2015) found that invasive plant species covered 5.94% of their 33,986-acre inventory area on Spotted Dog WMA, and listed the following species in their Table 28:

Common Name	Acres
cheatgrass	632
spotted knapweed	437
nodding plumeless thistle	290
Canada thistle	251
houndstongue	191
field brome (Japanese brome)	157
bull thistle	16
field sowthistle	10
black henbane	4
tall buttercup	4
butter and eggs	3
leafy spurge	2
Dalmatian toadflax	2
Sulphur cinquefoil	2
broadleaved pepperweed	2
Kochia	2
common tansy	1
lesser burdock	<1
oxeye daisy	<1
St. John's wort	<1
whitetop	<1

Base Budget Items and Work Priorities:

- Document and treat new weed occurrences during the course of any work on the WMA.
- Comply with FWP's Statewide Weed Plan and the Powell County Weed Plan.
- Work with the county on a weed map.

Management Direction:

Looking northeast across Deer Lodge, Montana, toward Spotted Dog Wildlife Management Area on November 13, 2015.

As managers of public trust resources, and as neighbors in a community with a heritage all its own, we will achieve only what people can achieve together.

Cooperation is essential to achieve compatible management of fish and wildlife habitat across the larger landscape, of which the Wildlife Management Area (WMA) is but a part. We welcome this opportunity to engage in fish and wildlife enhancement with our neighbors. It will be a priority, as well as a challenge, to budget for the commitment required to work with neighbors in the community. As every landowner knows, there's no substitute for good fence mending, of all kinds.

Part of a Larger Whole

Spotted Dog Creek lies out of view, between the headwaters of Jake Creek and the snowy mountains on the horizon.

For that very purpose, FWP employs a decentralized operational structure. Although FWP's Region 2 headquarters for this WMA is in Missoula, we made the conscious choice when refilling the position of WMAs Maintenance Supervisor in 2016 to continue housing that position and the local maintenance staff and equipment at Warm Springs WMA, with ready access to Spotted Dog. Similarly, the area Game Warden is based in Deer Lodge. Our Wildlife and Fisheries biologists for the area are located in Anaconda. These local professionals are vested with the delegated authority to speak and act on behalf of FWP, and are charged with becoming part of their local communities. We view this as an essential strategy for developing good and trusting working relationships.

The Spotted Dog WMA is a recreation destination that attracts the use and interest of people from all across Montana and beyond. As a public trust agency, FWP serves all citizens and will be responsive to the interests of anyone with a question or comment. As an efficiency for taking the pulse of public interests, FWP and the Work Group will continue checking-in with groups that have expressed interest in the WMA, such as the Anaconda Sportsmen's Club, Hellgate Hunters and Anglers, Rocky Mountain Stock Growers and Powell County government, to name a few.

Management Direction:

Enhance the food web, focusing on the base of the energy pyramid: soil health, litter, native forbs, pollinators and the like.

Base Budget Items and Work Priorities:

- Prevent new weed establishments with early detection and eradication.
- Where herbicide is needed to control weeds, spot-spray whenever possible rather than broadcast spray, and use the most selective herbicide for the job.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Maintain boundary fences to minimize livestock trespass.
- Consider prescribed cattle grazing to stimulate and maintain the native forb component in grasslands.
- When grazing, limit grazing during the nesting season and/or rotate treatments.
- Allow litter to develop and decay in grassland communities where litter should accumulate.
- Prevent off road vehicular travel.
- Recruit and retain large snags in forests.

Priorities for Special Projects when Feasible:

- Consider forest restoration treatments to foster the recruitment of naturally occurring stand characteristics in historically harvested stands.
- Develop forest management treatments to manage the risk of stand replacement events.
- Remove conifer encroachment in grasslands, aspen, and wetlands as appropriate.
- Replant (no-till) native forbs and other native plants on depleted sites.
- Curtail erosion where it is ongoing by installing structures and making landscape repairs.

Native Species Diversity

An estimated 183 wildlife species occur on Spotted Dog WMA. Additionally, native westslope cutthroat trout can be found in many streams.

Our emphasis on native species will be implemented by paying attention to the basic components of a healthy and diverse ecosystem: things like soil structure and health, vegetation litter and decay, environments for microbial activity, insects, and a diversity of native plants, particularly native forbs and woody riparian species. In the near term we don't mean to promise that we will routinely survey the ecosystem at this level of detail. But, we will think about our management practices and opportunities with a focus on the needs of and effects on the base of the energy pyramid and the intricacies of the food web.

Extensive wildlife surveys were done in the Upper Clark Fork River Basin during 2009, as part of the terrestrial wildlife assessment (Vinkey et al. 2010). Spotted Dog WMA was in private ownership at the time, and no sampling was done on the property. Some limited surveys, primarily songbird point counts had previously been done on USFS lands adjacent to Spotted Dog WMA by the Avian Science Center. Those mainly focused on conifer forest.

Two different summer interns completed initial small mammal surveys during 2011 and 2012, spending about 10 days on Spotted Dog. They completed 16 traplines, consisting of a mixture of Sherman live traps, Museum Special snap traps, standard Victor mouse snap traps and pitfall traps. Traplines sampled various aspen, grassland, bitterbrush, rocky outcrop, riparian, and conifer forest habitats. They captured 305 small mammals, including deer mice, voles, chipmunks, shrews, pocket gophers, and squirrels. An estimated 12 species were captured. The Phillip Wright Museum has nearly completed processing skins and skulls from the more difficult to identify species such as shrews and voles. A final report will be prepared once the identifications for these species are confirmed.

In 2013 the Avian Science Center was approached by FWP and the NRDP to conduct bird surveys across Spotted Dog WMA to provide baseline information on songbird populations prior to changes in management. They used a combination of spatially balanced sampling, which distributed surveys in proportion to the available habitat, and targeted sampling to adequately sample riparian habitats. Birds were surveyed using a point count survey protocol in which a distance is recorded to all birds seen or heard within a six minute count period. The technician also assessed the vegetation within 50 m of the point, assigning each point a primary habitat type and estimating the percent coverage and species composition in different vegetation layers including canopy, shrub, and ground cover.

They surveyed 308 points across 30 transects during 2013 (Clarke and Smucker 2014). There were 2803 bird detections representing 86 species and 2933 individuals. Four species were encountered only while walking between point count stations. Six Species of Concern were detected: Common Loon, Great Blue Heron, Northern Goshawk, Long-billed Curlew, Clark's Nutcracker, and Brewer's Sparrow.

Bat surveys were done in 2014, using acoustic detectors and several nights of mist-netting to capture bats. Six species were detected. Only a few bats were captured due to cold evening temperatures. Two Species of Concern were detected: Little Brown Bat and Hoary Bat. The Silver-haired Bat, a potential Species of Concern was also detected. Analysis of the acoustic data is on-going and should be completed in 2017.

Management Direction:

Golden eagle in the Blackfoot Valley, 2017.

Reverse population declines for Species of Concern.

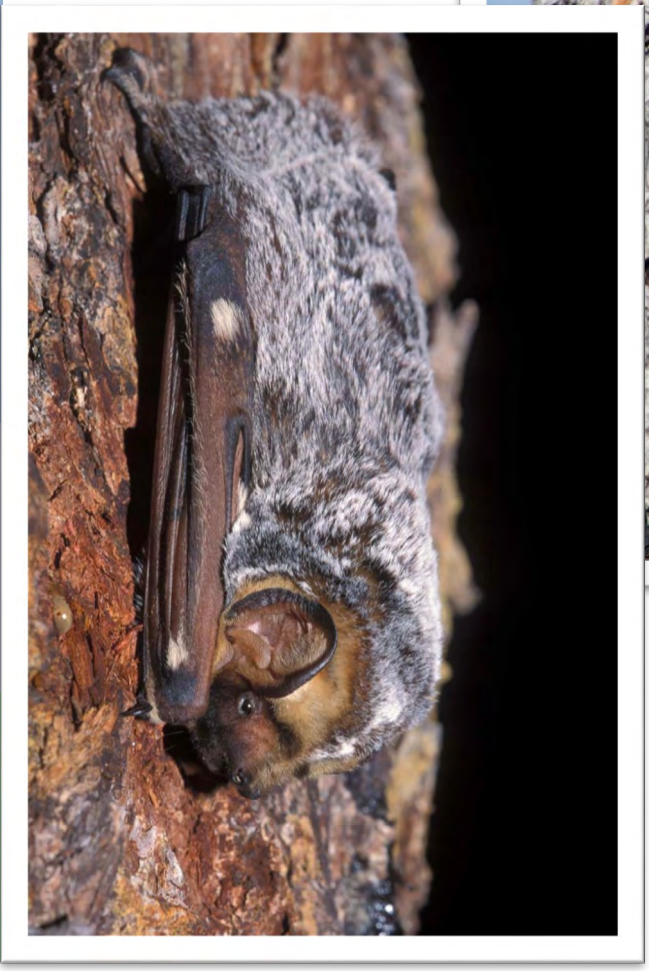
Long-billed curlew near O'Neill Creek on Spotted Dog WMA, 2017.

Base Budget Items and Work Priorities:

- Maintain native species diversity in healthy habitats, and work to restore species diversity in degraded habitats. Native species diversity includes managing native plant communities to support species-rich native animal communities including songbirds, raptors, reptiles, amphibians, small mammals, and insects.
- Riparian, wetland, and aspen communities support the highest wildlife species diversity, so those communities need to be managed with special care to ensure their protection and enhancement on the WMA.
- Maintain and/or restore when appropriate populations of Species of Concern that are naturally found in WMA habitats. Examples of Species of Concern as listed by FWP and the Montana Natural Heritage Program include the long-billed curlew, Brewer's sparrow, Lewis's woodpecker, northern goshawk, golden eagle, flammulated owl, western toad, hoary bat, and little brown myotis.
- Explore ways for the public to view and learn about wildlife, while minimizing impacts to wildlife and plants.

Species of Concern

Species of special concern are either known to be rare or declining, or perceived to be rare or declining due to a lack of basic biological information. The Species of Concern designation imparts no special legal or regulatory status for these species. The primary purpose of the designation is to help prioritize limited resources to provide the greatest return for the time and funding invested. Conservation planning can identify strategies to protect important habitats and other actions that can be taken to reverse population declines before Federal ESA listing is needed, preventing the need for burdensome regulations and restrictions. Much of this information can be found in the updated State Wildlife Action Plan developed to guide conservation of nongame species in Montana.

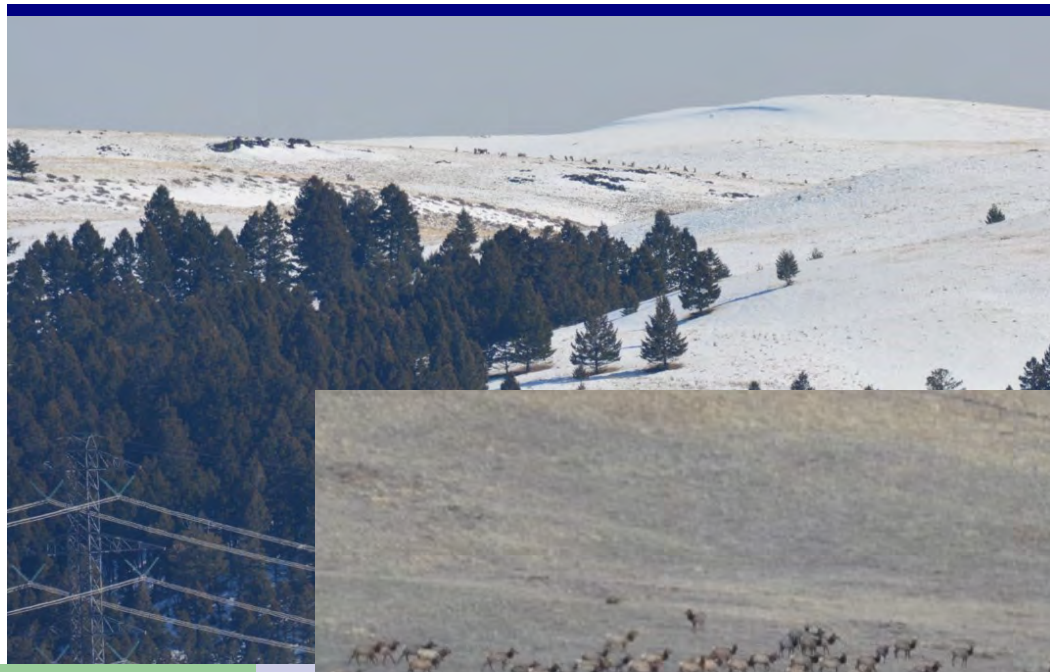


Species of Concern: Western toad (top), Lewis's woodpecker and hoary bat. Photos by Kristi DuBois.

Inventory and monitoring of all species can help us detect population declines early, before they progress to the point where drastic action is needed. Detecting and reversing population declines while species are healthy is much more effective and cheaper than waiting until they are in trouble before taking action.

Management Direction:

Prioritize Elk Winter Habitat in Management Units 1 & 2: O'Neill-Jake



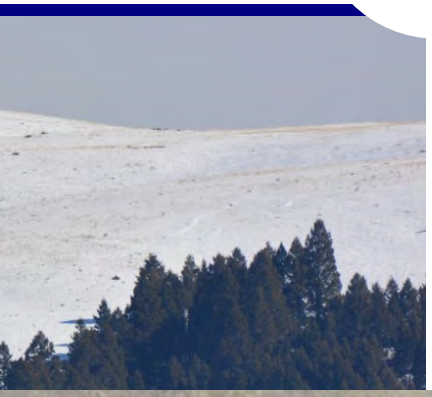
Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass and reserve forage for wintering elk.
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Coordinate closely with communications towers maintenance and powerline right – of-way maintenance along its entire length.
- Retain forest stringers and thickets.
- Consider removing individual bug-killed trees if needed to save the stand.
- Close the WMA to public access from December 2-May 15.
- Control hunting access if required during winter months to achieve elk harvest goals, while minimizing disturbance to elk on their winter range.

Priorities for Special Projects when Feasible:

- Forest management will employ a light touch as needed, if at all, to extend the function of small forest stands into the future and to manage risk.

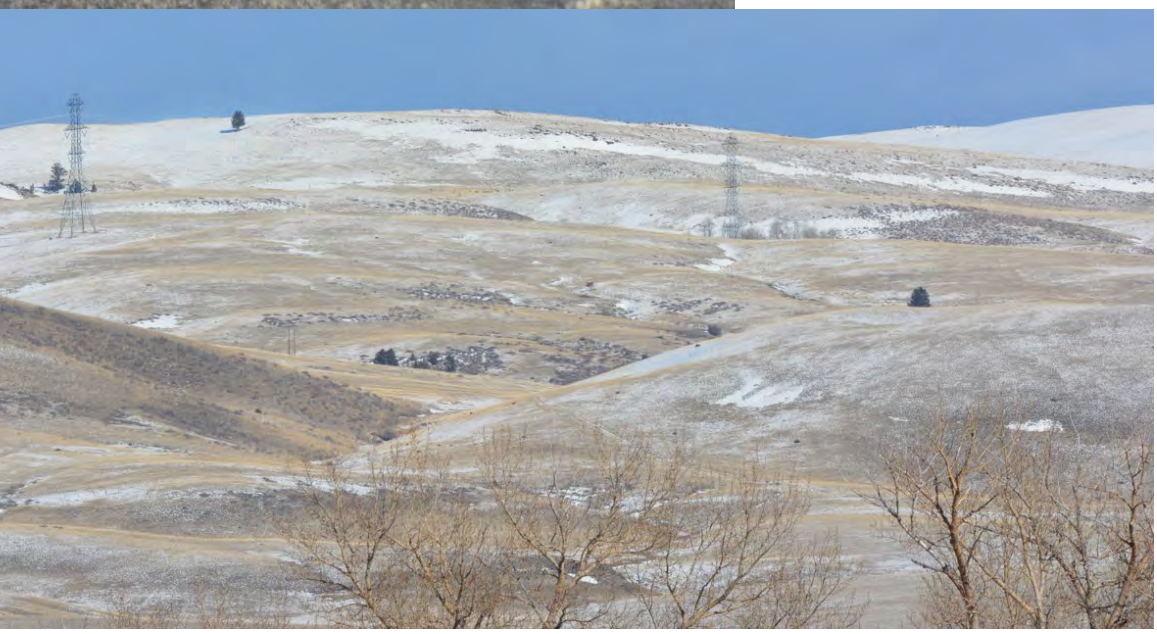
Elk Winter Habitat



Elk will benefit from habitat management practices that focus on fish and wildlife habitat broadly. However, it will be useful for WMA stewards to appreciate that Management Units (MU)1 & 2 are the locations where most elk spend the most time in the middle of winter.

So, the highest priority outcome for MUs 1 & 2 is the maximum sustainable standing crop of native grasses in winter. This desired outcome need not constrain our more broadly considered management options across the remainder of the WMA, but it should be viewed as the bottom line in MUs 1 & 2. Not to the detriment of bitterbrush, not to the detriment of wetland and riparian health, but as a layer of priority atop these basic values.

Harsh sites and cheatgrass pose management challenges, especially in MU-1. While there might be a temptation to broadcast spray noxious weeds to increase grass production in MU-1, this must be tempered by a consideration of cheatgrass response, and the trade-offs of resultant cheatgrass expansion taken into account. With that caveat, it will be important to keep weed spread at bay in MUs 1 & 2, especially considering their relatively high potential vulnerability to weed spread. It might make sense for WMA managers to spot-treat weed occurrences uphill from the BPA powerline, to prevent spread within these communities, and to set the powerline as a treated zone and a buffer against weed expansion from below. Bitterbrush located downhill from the powerline, primarily (though not entirely) will require special consideration while controlling weeds for a bunchgrass response.



As outlined in the preface to this document, the management of elk numbers is foundational to this habitat plan. So, it may be deemed necessary to allow some elk hunting and harvest on the winter range in winter. This would be carefully controlled to minimize the disturbance and displacement of elk during the critical winter period. A proposal to this effect in 2018 received emphatic opposition from some groups in the public and was withdrawn.

Management Direction:

Recover or restore aspen, wetland and riparian systems

Hansen et al. 2015. Page 81, Photo 74: Freezeout Creek, 2011.

Hansen et al. 2015. Page 194, Photo 138:

Base Budget Items and Work Priorities:

- Protect aspen, wetland and riparian areas from noxious weeds as a focus of overall weed management efforts.
- Protect these areas from unauthorized livestock.
- Avoid and correct road, culvert and sediment impacts.
- Prevent damage from off road vehicles.
- Manage conifer encroachment in aspen.
- Protect beaver on Spotted Dog WMA.
- Recruit and protect snags, especially deciduous spp.

Priorities for Special Projects when Feasible:

- Plant native riparian vegetation (i.e., willows).
- Prescribe more extensive forest management and conifer treatment to rejuvenate aspen.
- Consider redistributing beaver at such time as the forage base would support beaver.
- In the absence of beaver, consider mimicking beaver activity with instream structures.

Aspen, Wetlands & Riparian

Habitats associated with water support the greatest diversity of wildlife on Spotted Dog WMA, and generally across Montana. Such habitats are in relatively short supply in The West. It follows that water attracts development and human uses of the land, so we see a heavy footprint of land-use along waterways. In most cases, more can be done for wildlife by fostering the recovery and expression of habitats associated with water than by any other single action. And, the potential for successful recovery is high, given proximity to water. In a few cases on the WMA, most notably parts of Trout Creek, stream flows and the access of plants to water has been altered by such extreme land use that wetlands and riparian communities have shrunk and lack the ability to recover in the near term; active stream restoration may be needed to accelerate recovery or curb continued degradation in these situations.

West Fork Spotted Dog Creek, 2011.

At its most fundamental level, FWP's approach to aspen, wetland and riparian management on Spotted Dog WMA will be to feature these habitats and remove limiting factors within our control. Where livestock grazing is prescribed or where livestock trespass is a continuing issue we plan to fence livestock out, using portable, temporary fencing whenever feasible and appropriate. Along with roadsides, we plan to prioritize waterways for weed control and early detection of new weed occurrences. In aspen and around aspen and wetland areas, we will manage and remove conifer encroachment to allow deciduous woody species such as aspen, willow and dogwood to expand. Within coniferous forest types we will prioritize aspen relicts for restoration treatments and for weed control in old logging units.

Hansen et al. 2015. Page 197, Photo 141: West Fork Spotted Dog Creek, 2011.

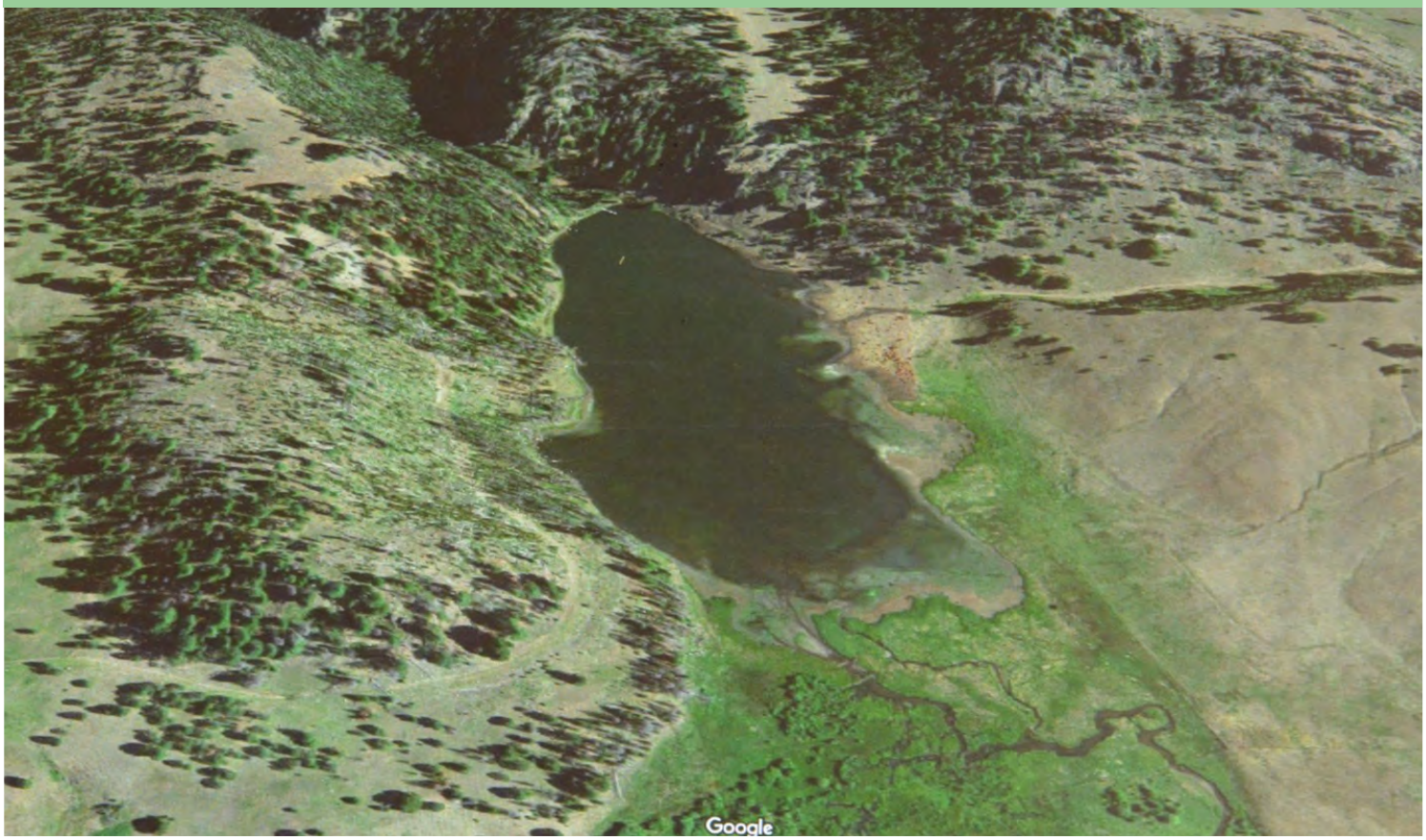
Aspen, wetland and riparian areas should be the most obvious measure of FWP's habitat management. These habitats are most important for most wildlife species, generally sustain the most incidental impact from traditional land uses, and generally are very resilient and responsive to rest and restoration. Therefore, monitoring should focus on aspen, wetland and riparian habitats to provide the clearest picture of FWP's management priorities and effectiveness for enhancing wildlife habitat.

Management Direction:

Enhance habitat for native westslope cutthroat trout and provide fishing opportunity on the WMA

Hansen et al. 2015. Page 200, Photo 147: Trout Creek, 2011.

Spotted Dog Reservoir on Spotted Dog Creek, 25 June 2015. Google Maps image.



Fisheries

Hansen et al. 2015. Page 96, Photo 84: Spotted Dog Creek, 2011.

Following purchase of the Spotted Dog WMA in 2010, FWP fisheries personnel conducted fish assessments on many of the streams within the WMA boundary in 2011 and 2012. The results of these surveys were summarized in a report entitled *Upper Clark Fork River Basin Stream Fish Sampling 2010-2012* authored by Jason Lindstrom, area fisheries biologist. The objective of the work summarized in this report was to determine fish species presence and relative abundance in streams on the WMA. Westslope cutthroat trout, a native species of concern in Montana, were found in all drainages on the WMA. Additionally, non-native brook trout were present in many locations at varying densities.

Fishing on the WMA is primarily limited to small stream angling for westslope cutthroat trout and brook trout that are typically less than 10 inches in length. The primary fishable streams include the mainstem of Spotted Dog Creek and Trout Creek. In addition to these opportunities, Spotted Dog Reservoir is located on the mainstem of Spotted Dog Creek near the lower boundary of the WMA and offers the primary flat water angling opportunity on the WMA. Because a portion of the shoreline of this small reservoir is located on private land, anglers are encouraged to study the property boundaries to avoid potential trespass onto private property.

In the summer of 2015, an inventory of all identified road crossings was completed by FWP fisheries personnel. Basic surveys were completed at 59 sites that described each crossing and its current state relative to fish passage and overall stream health. Additional fish sampling was also conducted above and below many of the crossings to better understand potential fisheries impacts relative to future management decisions. These data have not been published in a report and are still being evaluated. Preliminary findings indicate that a high number of existing crossings on FWP lands (likely a minimum of 25 culverts) pose at least some impact to fish passage and need to be prioritized and addressed to alleviate concerns. Also in 2015, the Natural Resource Damage Program commissioned a habitat assessment of the mainstem of Spotted Dog Creek on the WMA.

Results of this work were summarized in a report entitled *Little Blackfoot River Riparian Assessment, Contract # SPB-12-2177, Task Order 1.9*. Only the mainstem of Spotted Dog Creek was addressed by this survey work because it could be directly tied to the *Final Upper Clark Fork River Basin Aquatic and Terrestrial Resources Restoration Plans* (2012), which identifies lower Spotted Dog Creek (below the Spotted Dog Creek Reservoir) as a priority stream for fisheries habitat restoration. The assessment report identified one reach of Spotted Dog Creek upstream of the Pauly Homestead that was rated not sustainable. A draft restoration plan has been completed for this reach and is awaiting finalization and implementation.

Base Budget Items and Work Priorities:

- Protect streamsides from noxious weeds to minimize sediment delivery to streams.
- Protect streams from livestock impacts.
- Avoid and correct road, culvert and sediment impacts.
- Prevent damage from off road vehicles.

Priorities for Special Projects when Feasible:

- Utilize active stream restoration to address habitat degradation and channelization.
- Plant woody riparian vegetation where absent due to past land use practices.
- Remove or resize stream crossings (e.g., culverts).

Management Direction:

Maintain climax rough fescue stands where they currently exist, and manage for soil stability and a healthy mix of native increasers and decreasers in bunchgrass vegetation types overall.

Hansen et al. 2015. Page 29, Photo 21 Bird nest in open, diverse rangeland.

Hansen et al. 2015. Page 23, Photo 8:

Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass.
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Consider prescribed cattle grazing to add vegetation community structure in grasslands other than designated rough fescue reference sites, and as a tool for achieving grazing improvements on privately owned bunchgrass communities as well.
- Confine motorized traffic to open roads.

Priorities for Special Projects when Feasible:

- Restore cheatgrass sites in native grasslands on a prioritized basis, pending the development of sound methodologies for cheatgrass control.
- Restore abandoned roads to native grasses and forbs.
- Develop interpretive signage to increase the public's appreciation for native grasslands and management.
- Remove conifer encroachment.

Native Bunchgrass

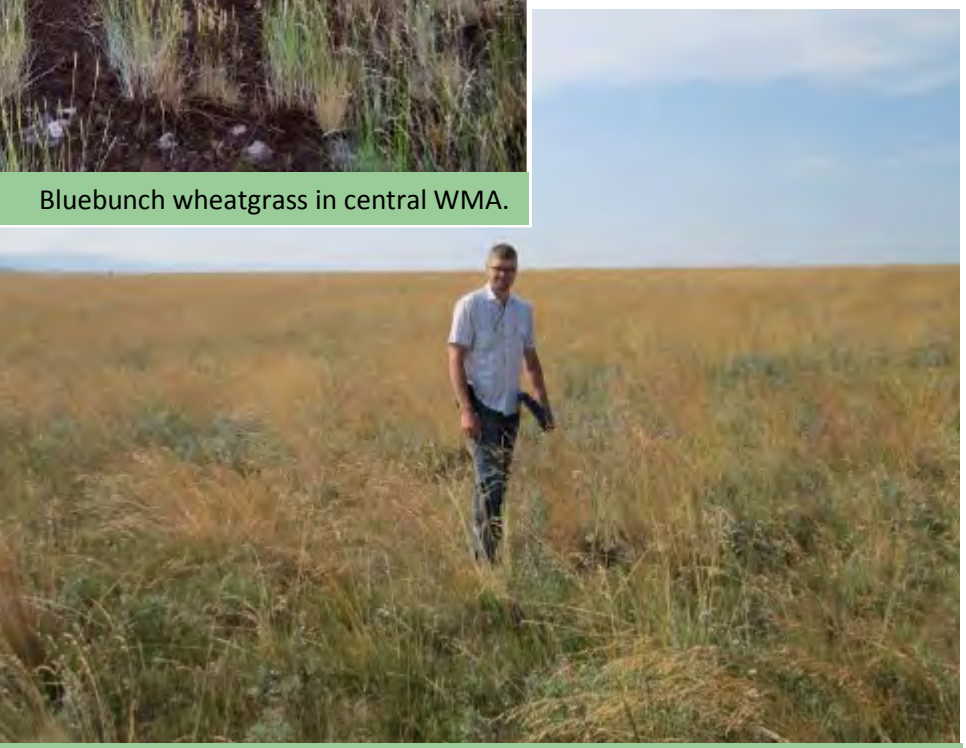
Rough fescue is an important bunchgrass species throughout the intermountain region, and extending eastward onto the plains that slope away from the Continental Divide. Spotted Dog WMA lies near the southern extent of rough fescue's widespread distribution in Montana. Rough fescue often occurs as nearly monospecific grassland stands, as well as a major constituent of many other grassland types. In Spotted Dog WMA several near pristine grassland stands of rough fescue were sampled (Hansen et al. 2015.)

Bluebunch wheatgrass in central WMA.

In Alberta, succession to a near climax state of rough fescue requires more than 20 years of rest after disturbance by intense grazing. Complete recovery following light grazing in southwestern Alberta has taken approximately 14 years of rest (Timenstein 2000, Hansen et al. 2015).

Hansen et al. (2015) awarded perfect ecological health scores to rough fescue stands in the northernmost portion in Management Unit (MU) 4. These rough fescue stands should be designated as reference stands for further study over time. Few rough fescue rangelands remain in such nearly pristine condition in Montana.

Where rough fescue occurs as a component among other bunchgrasses in different stands and habitat types, and on varying sites across the WMA, we will not manage specifically to increase rough fescue, but will manage to maintain it as a component of the healthy bunchgrass stand, at its present extent and distribution.



Hansen et al. 2015. Page 32, Photo 26 Rough fescue in north MU-4.

Bluebunch wheatgrass and Idaho fescue are climax dominant bunchgrass species on generally warmer, drier sites across the WMA. Compared with climax rough fescue stands, the bluebunch wheatgrass and Idaho fescue stands generally include a greater diversity of native species and vegetation life forms in climax or near climax condition. Bluebunch wheatgrass and Idaho fescue are more prominent components of the elk winter range on the harsher sites in MU-1 and MU-2, even though rough fescue is the more sought-after forage species in winter. We note that bluebunch wheatgrass is sensitive to livestock grazing.

Generally speaking, we see value in stimulating the more diverse bunchgrass communities on Spotted Dog WMA with prescribed summer grazing to maintain their species diversity and productivity.

Management Direction:

Hansen et al. 2015. Page 22, Photo 7 Bitterbrush flowering on Spotted Dog WMA.

Reserve antelope bitterbrush stands for their unique wildlife habitat qualities.

Hansen et al. 2015. Page 28, Photo 18:

Base Budget Items and Work Priorities:

- Maintain fences to minimize livestock trespass.
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion.
- Use biological controls or spot spray with the most selective herbicides to avoid damage to bitterbrush while addressing noxious weeds in MU-1 and MU-2.
- Keep elk numbers in balance.
- Discourage public camping and prohibit fires in MU-1 and MU-2.
- Limit motorized access to few well worn roads.

Priorities for Special Projects when Feasible:

- Scientifically study bitterbrush condition and trend over time.
- Monitor wildlife use in bitterbrush.
- Develop interpretive signage to help the public appreciate bitterbrush and its value.
- There may be a need at some point to intensively treat cheatgrass in bitterbrush stands, pending development of effective cheatgrass control methods.

Antelope Bitterbrush

Antelope bitterbrush is the main shrub species on Spotted Dog WMA, and may be confused with sagebrush at a glance. Hansen et al. (2015) found it on west and southwest facing slopes in Management Units (MU) 1 and 2, and reported that it is generally heavily utilized. It is a preferred browse species for livestock and for elk and deer in winter. Although its name infers use by antelope—and we see antelope wintering on bitterbrush toward Drummond—antelope near Spotted Dog WMA generally have not been wintering on the WMA.

Bitterbrush browsed in MU-1 or MU-2.

Hansen et al. (2015) identified the following impacts on and risks to bitterbrush on Spotted Dog WMA:

- summer and fall browsing by livestock
- winter browse utilization by wildlife
- competition from knapweed and cheatgrass
- increased risk of wildfire in dense cheatgrass
- infestation by caterpillars

Bitterbrush is very susceptible to fire, unlike some other browse species in western Montana.

Bitterbrush ecology and management fits well with an emphasis on elk winter habitat in MUs 1 and 2. In general we are dealing with harsh growing sites in these MUs and our approach will be to prevent and manage weeds watchfully and cautiously, given the susceptibility to cheatgrass invasion. Productivity is not there to warrant prescribed fire or particularly intensive livestock grazing treatments to expose bare ground. We do want to consider minimizing unnecessary fire risk, while appreciating that we can't prevent fire entirely. Livestock trespass could be an issue if not monitored and if fences are not maintained.

Distribution of antelope bitterbrush stands and bunchgrass stands relative to the BPA powerline in MU-2, 10 March 2017.

Management Direction:

Google Maps image from 25 June 2015, depicting part of the con

Coniferous Forest

iferous forest pattern and condition along Trout Creek, in MU-4.

Coniferous forest management is somewhat beyond the scope of this management plan. Making up about 15% of the lands deeded to FWP within Spotted Dog WMA, most of it lies within MU-5, intermingled in the Helena National Forest. As shown at left, it is largely cutover, having been harvested shortly before the property was acquired by FWP. In the near term, forest management on Spotted Dog WMA will be limited, as follows:

Base Budget Items and Work Priorities:

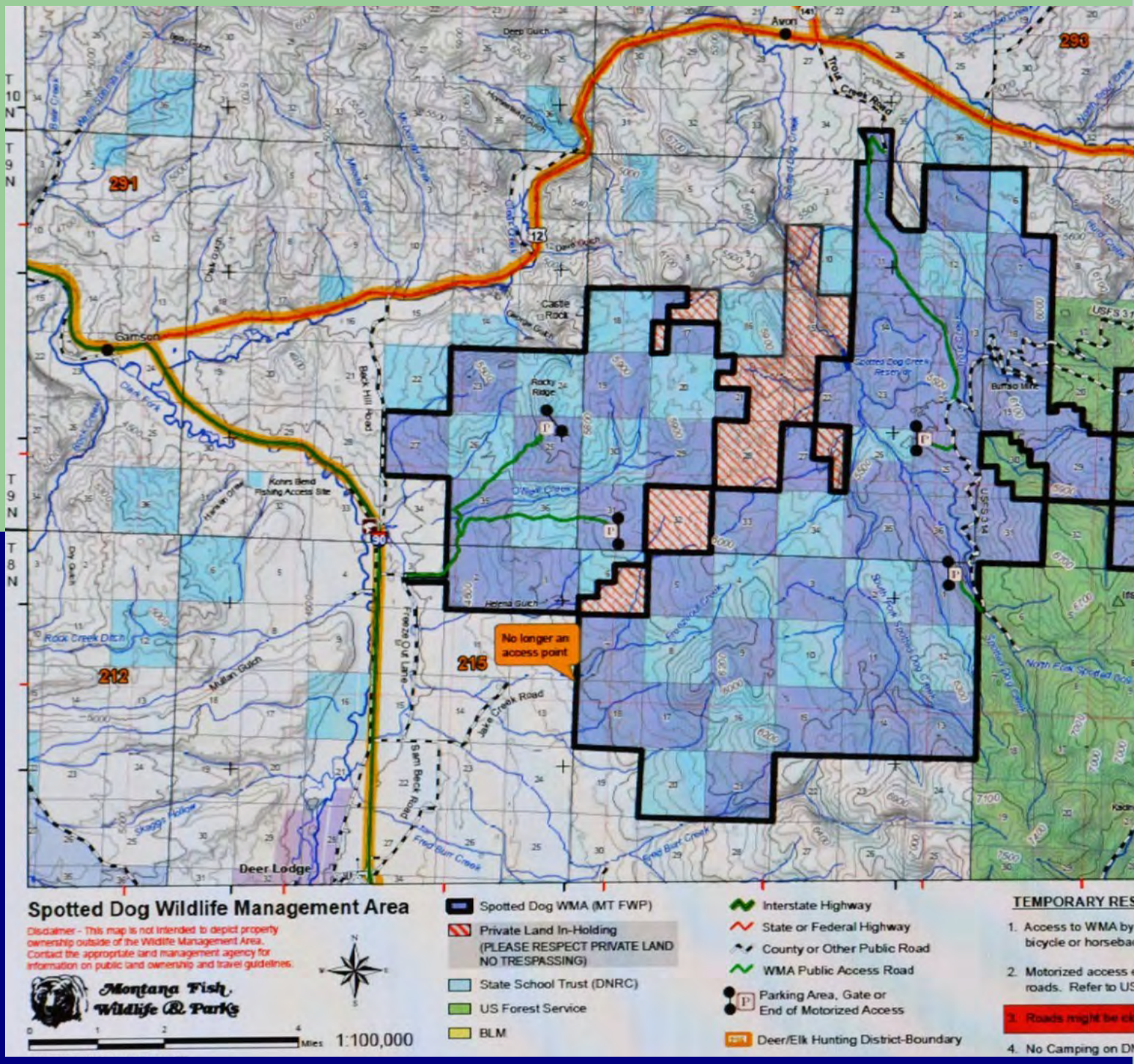
- Identify and eradicate first occurrences of new weed species or weeds in new places.
- Protect snags and snag recruits.
- Prohibit wood cutting for offsite use.
- Coordinate with the Helena National Forest on weed management across intermingled ownerships.

Priorities for Special Projects when Feasible:

- Inventory the forest.
- Develop a forest management plan that focuses on regeneration of a healthy forest structure.
- Treat forest disease issues as they arise and take any preventative actions identified in the forest plan.

Management Direction:

Travel Plan and Regulations in force since 25 August 2014. This travel plan is subject



Public Access

to change in the future, in accordance with the general guidance provided herein.

SPOTTED DOG WILDLIFE MANAGEMENT AREA

INTERIM PUBLIC-USE REGULATIONS

(Valid beginning 8-25-2014, unless otherwise posted, updated or rescinded)

1. Spotted Dog Wildlife Management Area (WMA) is open to public use from noon on May 15 through November 30. During this period, motorized travel is allowed only on open roads (see accompanying map). Hiking and horseback riding is allowed anywhere on the WMA, and mountain bicycling is allowed on roads and trails.
2. Motorized vehicles are restricted to the designated open road system (no motorized vehicles off roads or on closed roads; see accompanying map). The designated open road system includes O'Neill Ridge Road, Trout Creek Road, Spotted Dog Creek Road, Rocky Ridge Road, US Forest Service Road #314, and some associated roads in the WMA that are east of Road #314.
3. Gates--Do not park in such a way as to block gates (whether they are open or closed). Do not park along roads in such a way as to block motorized or nonmotorized travel.
4. Camping is allowed (motorized vehicles restricted to the road shoulder or pullouts). Camping stay limit is 14 days during any 30-day period.
5. NO CAMPING on DNRC Lands within Spotted Dog Wildlife Management Area.
6. No firewood cutting. Open fires are prohibited.
7. A recreationist may not keep horses on state school trust land overnight.
8. Permits are required for groups of more than 15 people; contact Region 2 FWP.
9. Contact Montana Fish, Wildlife and Parks (406) 542-5500 or DNRC (406) 563-6078 with any questions.
10. Pack in, pack out garbage and litter.
11. Hunting is in accordance with regulations pertaining statewide and to Deer/Elk Hunting District (HD) 215, Antelope HD 215, and Black Bear Management Unit (BMU) 301.
12. Trappers still need to secure a "Special State Lands Recreational Use License" from DNRC, usually at no additional charge. Contact FWP in late October for further information on trapping.
13. Be aware that cattle are still present on this WMA; please use caution and know your target!
14. Pets must be kept under the control of the recreationist and may not harass livestock.
15. The WMA will be closed to all public entry from December 1 until noon on May 15, to provide undisturbed access for elk, deer and antelope to critical winter habitat.
16. Due to the winter closure, the WMA is closed to the winter season for mountain lion hunting, and will open for spring black bear hunting at noon on May 15th.
17. An exception to the winter closure allows snowmobilers to continue using the pre-existing groomed trail system along Forest Service roads (Tree Farmer Road and Irish Mine Road) in the eastern portion of the property, where potential conflicts with wintering wildlife are minimal. Snowmobilers must stay on the groomed route.
18. Outfitting is prohibited within the WMA.
19. Commercial activities are prohibited, except as authorized by permit, as specified by FWP's commercial use policy.

REPORT VIOLATIONS--During office hours call R2 FWP at 406-542-5500. Evenings, weekends and holidays, call 1-800-TIP-MONT (1-800-847-6668)

Montana Fish, Wildlife & Parks

Region 2 Office
3201 Spurgin Road
Missoula, MT 59804-3101
406-542-5500

Management Direction:

Offer access to appreciate fish and wildlife, and to effectively balance wildlife with their habitat.

Base Budget Items and Work Priorities:

- Maintain open roads to WMA statewide maintenance standards.
- Enforce road closures and other user regulations to lessen user conflicts and resource damage.
- Manage hunter access to provide the publicly desired hunting experience and effectively/ethically harvest wildlife populations.
- Allow over-the-snow access on USFS Road 314.
- Maintain the winter closure, with any exceptions noted, to limit human disturbance of wintering elk and deer.
- Maintain effective and informative signage, focusing on identifying property boundaries in the most likely locations of trespass onto neighboring lands.
- Implement and enforce fire season restrictions in accordance with interagency direction as needed.
- Develop and maintain updated travel maps, regulations and information online and on paper for distribution.

Priorities for Special Projects when Feasible:

- Develop portal/entrance signage.
- Develop a trail system, which would be a project in need of definition, objectives and funding.
- Identify designated camping areas if needed in the future to control the footprint of camping on the WMA and to minimize resource impacts, while avoiding the installment of campground developments.

Public Access

Montana's successful lawsuit against ARCO and resulting settlements provided funding to remedy, restore, and or replace lands in the Upper Clark Fork River Basin that have been injured or impaired. The purchase of Spotted Dog WMA, using NRDP funds, was intended to replace lost natural resources with substantially equivalent wildlife habitat, scenic vistas and recreational opportunities. Accordingly, the recreational attributes of the WMA are of considerable importance to the public.

Public access to the WMA will be maintained for the public's use and enjoyment as long as wildlife and land management objectives are met. This unique property has many recreational attributes, such as hunting, fishing, bird watching, wildlife viewing, sight seeing, horseback riding, hiking, and primitive camping. The WMA and adjacent US Forest Service (USFS) lands offer excellent summertime opportunities on designated routes for ATVs, motorcycles, and conventional wheeled vehicles. The motorized use has become very important to many people, especially less mobile and older individuals. The WMA also allows for passage by snowmobilers and cross-country skiers on designated routes in MU-4 and MU-5.

Access currently exists yearlong via USFS road # 314 from Elliston. This road provides summertime recreational access for both non-motorized and motorized access. The road is a main hunting access in the fall, and is widely used for snowmobiling and skiing in the winter as it is part of the groomed snowmobile trail system. The road is travelled in the summertime and fall by means of ATVs, motorcycles, along with conventional vehicle traffic, and has served as a desirable access to the WMA and USFS lands for horsemen and by foot. USFS regulations allow for motorized use east of USFS #314 on designated routes. The "Old Baldy Ridge Trail" intersects USFS Road # 314 about 5.5 miles south of Elliston and traverses the ridge south for several miles, crossing some WMA and State Lands.

Other motorized access points exist to the WMA: Avon south to the intersection with USFS # 314, as well as Rocky Ridge and O'Neil Creek). Additional dispersed points of access provide walk-in hunting access.

The Spotted Dog Work Group discussed whether better access for fishermen to the Spotted Dog Reservoir should be provided, by means of road or trail improvements, and deliberations continue.

The Work Group provided the Powell County Commissioners with comments regarding the potential opening of the Old Stage Road (OSR), which is an old historic public roadway through the WMA. Whereas the Work Group recognizes the public's right to use the roadway and the opportunity to access the WMA and beyond, we had numerous concerns regarding the road opening as it will impact wildlife and land management efforts at certain times of the year. Closure to wheeled vehicles during hunting season may be advisable. FWP may consider closures of some additional spur roads , such as UFS #341-J1, and others to accomplish wildlife management goals.. As the OSR will not be maintained during the winter months, it will likely be utilized by snowmobilers to pass through the WMA, which may present an issue for wildlife management on the winter range.

Furbearer trapping rules for the WMA are not yet clearly defined beyond the requirement that trappers obtain permission from FWP. FWP will review trapping rules for Spotted Dog WMA with an objective of restoring a beaver population, among other possible objectives. In 2017 FWP and the Commission authorized a permitting process for one trapper per season to trap wolves on Spotted Dog WMA. Trapping regulations pertaining to Spotted Dog and other WMAs are found in the furbearer and wolf regulations booklets.

Management Direction:

Develop interpretive signage and other informational materials to enhance the public's appreciation of their WMA.

Examples of birding brochures from http://mtaudubon.org/birding/birding-montana/

Base Budget Items and Work Priorities:

- Design and install a large-panel highway sign, to be placed along Highway 12 or other appropriate highway location, to inform the public that Spotted Dog WMA is located on this landscape and was purchased and is managed with dedicated state funds.
- Work with Audubon and local birders to develop a bird list and birding brochure for Spotted Dog WMA.
- Work with local historians to uncover and interpret the history of the Spotted Dog area, and to make that information available to the public.

Priorities for Special Projects when Feasible:

- Develop interpretive signage, recognizing that it can be expensive to design and is vulnerable to vandalism in remote locations.
- Develop portal/entrance signage.
- Develop a trail system that would incorporate low-profile interpretive signage and/or involve brochures. Consider a diversity of travel types, including interpretive motorized travel routes on the established open road system, as well as trails for nonmotorized use.

Interpretive Resources

Interpretive resources include large-format sign panels for use along highways, kiosks for highlighting resources of special interest, and brochures, among other signage or informational materials.

Resources on Spotted Dog WMA, which are worthy of interpretation for the public's enjoyment include birds and birding opportunities on the WMA. Developing and producing a birding guide for the WMA would be a great way to involve interested citizens, groups and schools in finding and documenting the diversity of bird life in the area.

Similarly, this WMA features unique and important vegetation types, such as rough fescue and antelope bitterbrush, which would attract public interest when pointed out and described. Stream conservation and restoration activities, among other management activities, also would be worthy of interpretation. Cultural resources and a rich local history should not be overlooked.

A large destination sign along Highway 12, for example, would inform the public that their hunting license dollars and NRDP funds are invested here. Besides attracting interest, such signage is an important form of disclosure and transparency, which directs the public's attention to tangible results of governance.

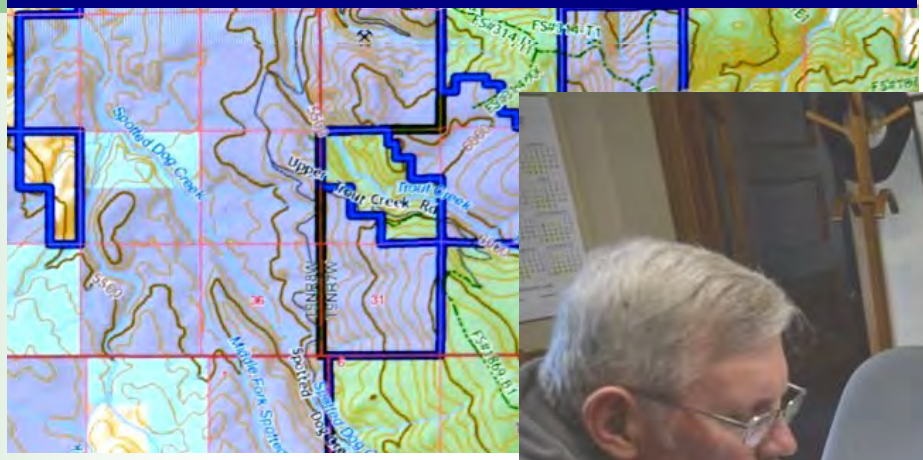
Example of a large-format panel identifying a WMA from a highway.

Example of an interpretive panel on a WMA.

Robert Nelson and a sheepherder's cairn on the WMA.

Management Direction:

Clip-out showing intermingled FWP, DNRC, USFS and private ownership.



Establish mutually beneficial property boundaries, facilities and improvements

Powell County and DNRC officials discussing the Stagecoach

Base Budget Items and Work Priorities:

- Communicate routinely and effectively with Powell County, DNRC, USFS and neighbors.
- Cooperate with all affected parties on the Old Stagecoach Road issue.
- Work with DNRC on matters of leasing DNRC lands to FWP and on an advantageous future ownership pattern within the WMA.
- Work with private neighbors on fences, weeds, advantageous property boundaries, and trailing livestock across the WMA.
- Work with the USFS on the shared management of intermingled parcels.
- Prepare an annual report of maintenance activities.

Priorities for Special Projects when Feasible:

- Construct new boundary fences where still needed.
- Develop portal/entrance signage.
- Identify designated camping areas if needed in the future, but avoid installing campground developments.
- Work on proposing land transactions and public involvement to block up FWP ownership within Spotted Dog WMA.

Infrastructure

Efficiency in managing Spotted Dog WMA is challenged by the checkerboarded mix of FWP, Montana Department of Natural Resources and Conservation (DNRC), Helena National Forest (USFS) and private ownership within and intermingled around the WMA. An essential near-term part of WMA management is to maintain the leases and other agreements needed for the WMA to function as a unit. In the long term, FWP will investigate property exchanges and acquisitions as ways to block up ownership within and around the WMA.

Road route across the WMA.

As outlined in the Public Access section of this Habitat Plan, FWP will cooperate with Powell County and affected parties to address the issue of the Old Stagecoach Road, which crosses the WMA. Resolution of this matter will affect fences, maps, signage, maintenance, weed control and public access. The details of this Habitat Plan are, by necessity, dependent on the outcomes of the numerous connected decisions related to the Old Stagecoach Road. Currently, the road is not designated as an open road in the WMA travel plan.

Fencing is a large part of the annual maintenance responsibility on Spotted Dog WMA, along with permanent signage, road maintenance and noxious weed management. Maintenance of the physical infrastructure of the WMA is important to the function of the WMA and to the public. Maintenance will meet standards set for all WMAs statewide. FWP will prepare an annual report that details the year's maintenance accomplishments.

Interior fencing has deteriorated and now serves only as a hazard to wildlife movement. Volunteer efforts to remove dilapidated fences will continue, thanks to the interests of the Rocky Mountain Elk Foundation and others in the public.

Rocky Mountain Elk Foundation volunteers removing old wire.

A large barn stands near lower O'Neill Creek in MU-1, and old structures remain on the Pauly Place in MU-4. FWP will not remove these structures, with the possible exception of the mobile home at the Pauly Place. They serve as reminders of a time gone by and are part of the story of this WMA and the community. FWP would not rule out maintenance of the barn in MU-1, such as roofing as needed, to extend its life if desired. The old wooden remains at the Pauly Place will be allowed to stand until the land reclaims them. The modular home may be removed.

Artifacts of various kinds will be left in place undisturbed, unadvertised and unmarked for their protection until such time as a dedicated professional effort at curation and interpretation might be undertaken by this or future generations.

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Appendix

Rocky Ridge in Management Unit 1, viewed from south of the barn on the O'Neill Creek Road, 3 June 2015.

Appendix A

Report of the Access, Travel and Recreation Management Subcommittee

Spotted Dog Work Group

17 November 2016

Compiled by Bill Pierce

Access and Travel :

Reasonable access should be maintained to the WMA for the public's use and enjoyment as long as wildlife and land management objectives are met.

Access currently exists yearlong via USFS road # 314 from Elliston. This road provides summertime recreational access for both non-motorized and motorized access. The road is a main hunting access in the fall, and is widely used for snowmobiling in the winter as it is part of the groomed snowmobile trail system. The road is travelled in the summertime and fall by means of ATV's , motorcycles, along with conventional vehicle traffic, and has served as a desirable access to the WMA and public forest lands beyond for horsemen and by foot. USFS regulations allow for motorized use east of USFS #314 on designated roads and routes.

Other access points exist to the WMA; Avon south to the intersection with USFS # 314 and access points from the Deer Lodge Valley; Jake Cr., O'Neil Cr., and Freezeout Cr. The latter are primarily walk-in hunting access points to the WMA.

Access along the eastern edge of the WMA is open to wheeled vehicles in the summer months and to snowmobiles in the winter months. This route is USFS Trail # xxx and is commonly known as the "Old Baldy Ridge Trail " This trail intersects USFS Road # 314 approx. 5.5 miles south of Elliston and traverses the ridge south for several miles and provides a panoramic view of the WMA and surrounding areas. The trail is primarily on Forest Service property, but crosses some WMA , and State Lands.

The advisory committee also discussed if better access for fishermen to the Spotted Dog Creek Reservoir should be provided, by means of some road or trail improvements to that location.

The advisory committee has provided the Powell County Commissioners with comments regarding the potential opening of the Old Stage Road (OSR), which is an old historic public roadway through the WMA. (reference letter to the Powell County Commissioners dated 3-13-16). Whereas the working group recognizes the public's right to use the roadway and the opportunity to access the WMA and beyond, the working group had numerous concerns regarding the road opening as it will impact wildlife and land management efforts at times of the year. Possible closure to wheeled vehicles during hunting season may be advisable. FW&P may want to consider closures of some additional spur roads , such as UFS #341-J1, and others to accomplish wildlife management goals.

As the OSR will not be maintained during the winter months, it will likely be utilized by snowmobilers to pass thru the WMA .

Recreation:

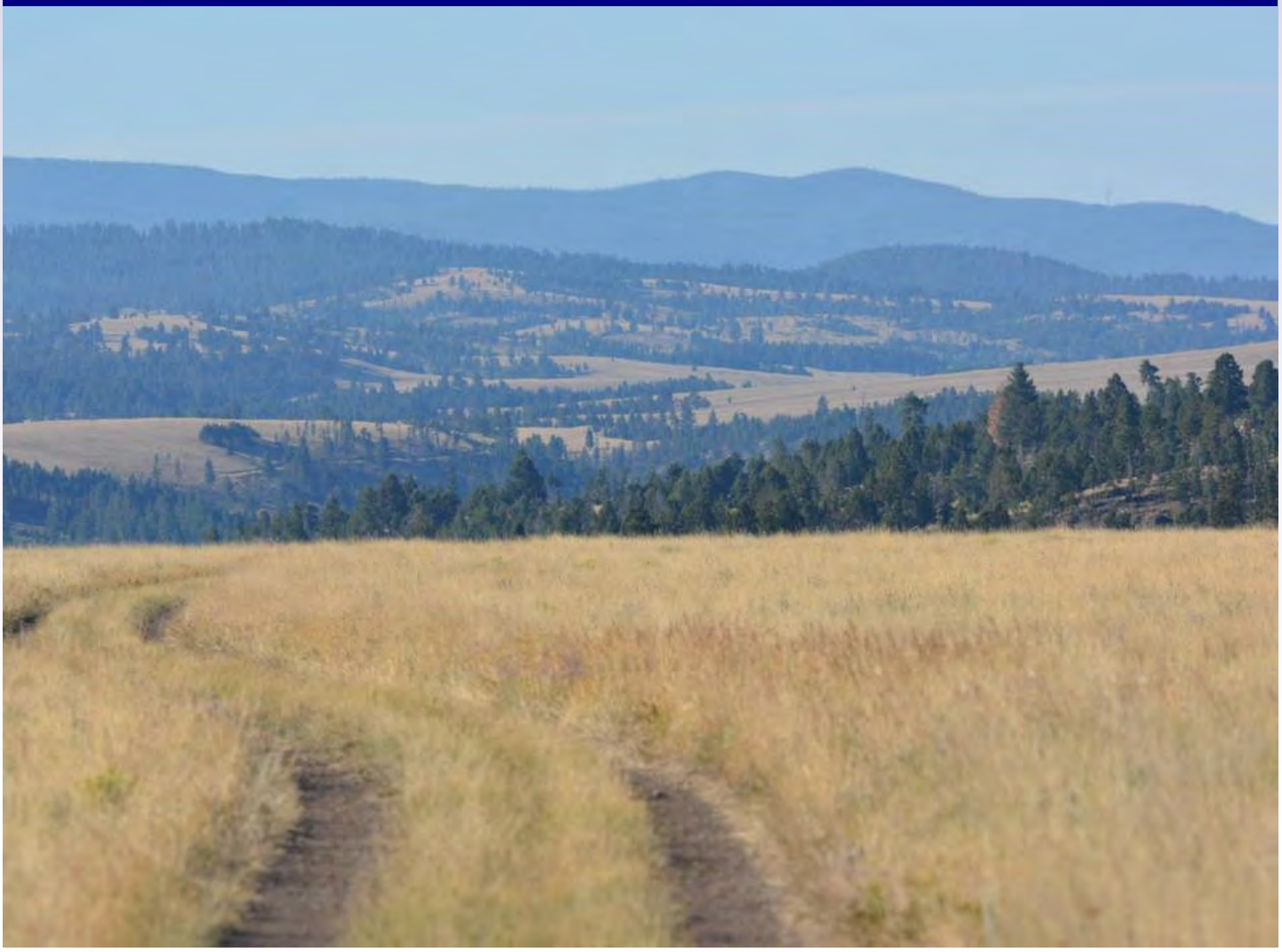
Montana's successful lawsuit against ARCO and resulting settlements, provided funding to remedy, restore, and/or replace lands in the UCFRB that have been injured or impaired. The purchase of Spotted Dog would replace lost natural resources with substantially equivalent wildlife habitat ,ecosystem services, scenic vistas, and recreational opportunities.

As a result of this unconventional source of funding for the purchase of the Spotted Dog property, the recognition that not only the unique grassland , wildlife and habitat is important , but also that the recreational attributes are of considerable importance to the public.

Appendix A continued

The WMA will need to be managed with regards to this fact, albeit the wildlife and habitat being the primary focus. This unique property has many recreational attributes such as, hunting, fishing, bird watching, wildlife viewing, site seeing, horseback riding, hiking, and limited camping, etc. In addition the WMA and adjacent US Forest Service lands offers excellent summertime opportunities for motorized use on designated routes for ATV's, motorcycles, and conventional wheeled vehicles of which people travel on and through the WMA to enjoy the views , the outdoors, the wildlife and related activities. The motorized use has become very important to many people, especially less mobile and older individuals, etc. The WMA also provides excellent wintertime opportunities for back country skiers and for snowmobilers on designated routes through the property .

Driving south from the Trout Creek access point, in Management Unit 4, 15 August 2016.



Appendix B

Report of the Wildlife Subcommittee

Spotted Dog Work Group

Compiled by Dan McQueary

The following history pertains to Hunting District 215, as witnessed by local landowners while growing up and working their ranches to the present time.

In the early 1960s, there were very few elk. If someone killed an elk it was big news. On the first day of the season, five elk were seen leaving the Jake-Freezeout area. That was big news. Jake-Freezeout – Lower Fred Burr Creek- Upper Bagg's Creek were hot spots for mule deer then.

There were a few more elk in the mid-1960s. Still, if someone saw 8-12 head in a bunch it was big news. In the winter of 1966, Dan McQueary snowshoed in the Jake-Freezeout area. There was lots of snow. Elk were in this area only, and he filmed 85-90 head. Moose were a rare sight in those days.

Elk were on the increase in the early 1970s. There were sightings of 30-40 elk in a bunch. Moose sightings were a few more frequent. Deer were still plentiful, maybe 400-500 mule deer on the winter ranges in the Jake-Freezeout—Lower Fred Burr Creek—Lower Baggs Creek area. There were very few birds of prey—eagles, hawks or ravens—but lots of grouse.

In the mid-1970s, Rock Cattle Company purchased Spotted Dog from Williams and Tavenner. Elk were on the increase at that time, and Spotted Dog was closed to hunting. Moose numbers were stable; the willow patches weren't overgrazed. Deer were still plentiful and there were still lots of grouse. And, there were grizzly bear sightings. FWP denied transplanting grizzly bears, but Dan McQueary says they were caught on film.

In the late-1970s – early 1980s, elk were becoming plentiful, and it was not uncommon to see 150 to 300 head in Spotted Dog on opening day of the hunting season. Moose sightings were more plentiful, and there were reports of 5-12 seen in any one day. Deer may have been starting to decline. A grizzly bear was killed in that period.

By the mid-1980s to late 1980s, elk were really increasing. There would be 250 to 400 elk in Spotted Dog on opening day. Moose seemed to be slowly increasing and willows were starting to show signs of overgrazing on the West Fork of Spotted Dog. Deer were on the decline. The beaver ate themselves out of house and home on the West Fork of Spotted Dog. But, there were still plenty of grouse.

Elk numbers were high enough in the early 1990s that landowners started to complain. There was a late-season elk hunt in 1990. FWP said there were over 700 elk at that time, which was double the numbers in the early 1980s. FWP wanted to harvest 100 elk in the late season with 260 hunters. Moose were still increasing in the early 1990s and starting to spread out into the south part of Hunting District 215. Deer were definitely on the decline. There was more sign of mountain lions. Black bear numbers were declining, but people were still seeing grizzly bears. Eight wolves showed up.

In the mid 1990s, elk increased to 1,000 – 1,400 head on winter range. The elk were on Spotted Dog and private land from Burnt Hollow to Beacon Hill. Moose numbers were stable, but there were fewer deer and grouse. Eagles, hawks and ravens were on the increase in the area.

In the late 1990s, the elk herd started to stabilize. Moose started declining. Deer were not as plentiful, and elk had taken over their winter range. There were fewer grouse and small birds, it seemed. Ravens were everywhere. Small game—jackrabbits and snowshoe hare—were on the decline. Wolves were a problem for the next 15 years.

In the late-1990s to early 2000s, the elk herd went from about 1,400 head to 400 in 12 years. The elk winter range was from Burnt Hollow to Beacon Hill. Moose were few and far between, and the willows were recovering. Deer numbers were way down. Wolves were increasing; in one summer – FWP confirmed that 13 pups were produced; 2 died and 11 made it to fall. It wasn't uncommon to see 4-12 wolves together.

In the mid-2000s, wolf numbers went way down to sightings of 2-4 animals. Elk numbers increased. Moose were not declining, and mule deer numbers were still down.

Appendix B continued

To start the 2010s, wolf numbers were few and far between. Elk were increasing. Moose might have been recovering some, but mule deer were still down.

In 2016, elk numbers are unmanageable; more than 3,000 head are in Hunting District 215. Moose and mule deer show signs of recovering. One pair of wolves is around.

Hansen et al. 2015. Page 195, Photo 140: Abandoned beaver dam on Jake Creek, 2011.

Appendix C

History of the Spotted Dog Reservoir

Spotted Dog Work Group

by Pat Hansen

This is information about the dam and reservoir from a history written by owner Dan Davis in 1999.

In June of 1953, heavy rains resulted in flooding that caused the wooden spillway of the dam in Spotted Dog Creek on the George V. Davis Ranch to wash out. The break occurred at night, and by morning, although the creek was flowing normally, the damage was evident. All the cross fences in the meadows were torn away, some ditches were washed out, and all kinds of debris spread across the meadows, showing the water's power and extent.

The old dam had been built in the 1930s and was located in the SW ¼ of Section 10 on property owned by Jerry Mizner. His wife was a sister of the Kimmerly brothers who owned the ranch at that time. The dam was used for irrigation water storage so this loss made replacement important.

During the fall and winter months, plans were developed for a new dam. It was decided to relocate upstream approximately a mile and a half in the SE ¼ of Section 15. The site was better suited and would create more water storage and also was on land owned by the ranch. When the dam was completed, the water covered the old Spotted Dog Creek stage crossing.

Tom Elliott, a surveyor from Deer Lodge, was engaged. He did the surveying for the spillway and the earth fill. The plan called for an earth-filled dam 200 feet wide, 26 feet to the top of the fill, and a spillway 30 feet wide, narrowing as it dropped to approximately 20 feet. The start of this spillway was approximately eight feet below the top of the fill. The dam would back up a lake about a third-mile long by a quarter-mile wide.

In June of 1954, the underground outlet was built. Ranch manager, Dan Davis, and ranch employees, Harry Dickinson and Harlan Clark, did the work. Using the ranch's TD9 dozer, Dan diverted the creek and created a smooth grade for the outlet. The concrete culvert was 18 inches in diameter and in 4-foot lengths. It was purchased from Elk River Concrete in Helena and hauled to the dam site using the ranch truck. This culvert was suspended in forms, and concrete was poured beneath and halfway up the sides. The dirt was filled in around it all. The outlet was 110 feet long and followed the natural grade of the creek. After this was completed, the creek flowed through the outlet while the earth fill was completed.

That summer, a petroleum pipeline crew was crossing the meadows of the ranch and was unable to do proper clean-up due to swampy conditions. An agreement was made for the ranch to do the cleanup at a later date in exchange for the pipeline crew using their D8 Cat for some of the initial earth moving to start the fill.

Early in September, work began in earnest on the fill and the spillway. Dave Newman of Elliston was hired with his D7 Cat and a carryall to do the earth moving. The fill dirt was removed from the area above the dam and dumped on the fill. Dan used the D9 to level the fill as it was hauled in, making layers about 8 inches thick. Using a small gas pump and a garden hose, water was sprayed over each layer. Then a ranch tractor was used to pack the fill. Layer by layer, the 26-foot fill was created and was completed early in November. The upper side was sloped, and the lower side has a "cave slope" or as steep as possible. After the fill was complete, the upper side was riprapped with rock from the area.

As the fill was being formed, the spillway was also under construction. A cut was made in the hillside on the east side of the dam using the TD9. The crew building the spillway, and at times assisting on the fill, consisted of ranch employees Don Davis, Jim Arkell, Bill Thomas, Harlan Clark, Harry Dickinson, Glenn Davis, and Leo Newman - brother of Dave.

All the concrete was mixed in a small gas-powered cement mixer and hauled by wheelbarrow to the forms. Gravel was hauled from the Little Blackfoot River. Two lengthwise piers were placed in the spillway and acted as support for a walkway to access the dam. These piers also created divisions for placement of planks which, when lowered, could raise the level of the lake about 18 inches. An apparatus was made from a long shaft which, when turned, could raise and lower the planks suspended on chains.

Appendix C continued

Caird Engineering of Helena built the shutoff gate for the outlet. It was operated by a worm gear from the end of a walkway built out from the dam top for access to the wheel that operated the gate.

The lake filled in the spring of 1955, and the water from the lake was used that year. Water would run over the spillway until about the first of July – then water was released through the underground outlet. The lake storage made it possible to completely irrigate the meadow one more time before haying started. At that time, the outlet was closed down, but a small amount of water was left running to supply stock water and to protect the fish population. There was always a small amount of leakage through the dam, but it has held tight for 45 years through wet and dry seasons. Looking back, it is with a great deal of pride and satisfaction to know that a good thing can be built with hard work and good planning – a "dam" good job!

Hansen et al. 2015. Page 112, Photo 101: Spotted Dog Reservoir, 2014.

Appendix D

Stone Johnnies – Vanishing Landmarks of the Lonely Hills

Spotted Dog Work Group

by Pat Hansen

Crowning lonely buttes or standing at the edge of mountain trails are carefully constructed rock towers, built without mortar by Indians, early settlers and sheepherders.

The rock cairns are called Stone Johnnies, Rock Johnnies, stone men, butte markers, water markers, and, because many of them were made by sheepherders – sheepherders' monuments. Unfortunately, these historic landmarks are rapidly disappearing due to weather, animals, and especially vandalism by man.

Indians used rocks to mark water and caches, as memorial cairns and as markers to designate the route along which they intended to drive buffalo before a hunt.

The tradition of sheepherders' monuments developed centuries ago in Spain, where the transhumantes system of sheep raising - the transferring of sheep from mountain to lowland pastures and back according to the season - originated.

Sheep came to America with the conquistadors and the priests into the Southwest and California then up into the Northwest, Wyoming, Montana, and the Dakotas. With many of the sheep came Basque sheepherders from the French and Spanish Pyrenees mountains. They called the rock markers "Rock Boys," a possible origin for "Stone Johnny." These markers were silent guides - good landmarks in a storm, indicators of water holes, and as boundary markers.

By the early 1900s, sheep were big business in Montana with 4.2 million grazing the immense open ranges of the Big Sky Country. The sheep were most often grazed in bands of 1,000 to 3,000 head, with each band watched over by a sheepherder and his dogs.

Many of the stone columns built by these men indicate a stock driveway, the boundary of a sheepherder's range, or fresh water at a nearby spring or stream.

The markers were made of whatever stone was in the area including massive, lichen-covered boulders or shale. The different types of rock and designs make each of the monuments unique. Fred Benson, a rancher north of Deer Lodge, tells of a monument he once saw that looked like a mound built within a mound and was almost the size of his kitchen.

No one knows why a cross is attached to a double-tiered monument located northeast of Deer Lodge on the Spotted Dog Wildlife Management Area.

Now an elevation marker, a Stone Johnny southeast of Deer Lodge stands watch at the edge of a high mountain park overlooking the Deer Lodge Valley and marks water - a cool mountain stream running at the base of the hill.

There is a great deal of history connected with these markers wherever they are found throughout the West – they are not just "piles of rocks," but true landmarks of the lonely hills.

Robert Nelson and a Stone Johnny on the WMA.

Appendix E

The Mullan Road

Spotted Dog Work Group
by Pat Hansen

The 624-mile-long Mullan Road was the first federally funded, first engineered and first road to connect the Missouri and Columbia River drainages.

Lt. John Mullan was commissioned by the Army to scout a route for a military road from Fort Benton to Fort Walla, in Washington Territory, near the Columbia River. It was built by U.S. Army troops under the command of Lt. Mullan, between the spring of 1859 and summer 1860, and was the first wagon road to cross the Rocky Mountains to the Inland of the Pacific Northwest.

Construction began July 1, 1859 at Fort Walla Walla in what is now Washington and was completed August 1, 1860 at Fort Benton in Montana. The road was declared completed in 1862 after improvements were made with some parts relocated because of site conditions and washed out bridges were replaced.

Although it was used only once for a military mission in 1860 to move supplies and a contingent of 300 soldiers from Fort Benton to Fort Walla Walla, the Mullan Road was the route used by thousands going to the gold rush areas of Montana and Idaho, as well as many settlers moving to the Northwest.

Mullan predicted the railroad would come through Blossburg above Elliston. Northern Pacific followed the route he said and laid rails through the Little Blackfoot Valley in 1883 with the driving of a golden spike celebration near Gold Creek.

The old road…the Mullan military road also used as the Elliston to Deer Lodge stage road…hasn't been used since 1972 when Rock Creek Cattle Co. owners installed gates to prevent travel through their property. At the time there wasn't much dispute about it, even though the road was and still is a county road. In the early 1980s, to prevent vandalism on new construction, the company installing a new gas pipeline requested the gate from Freezeout to Rock Creek Cattle company be closed and it has remained locked to the present time.

At the time, no one objected to the road closure because it was only being used by ranchers Bill Mosier, George Reistad, Lars Olsen, and Dave Johnson with property in the Spotted Dog area and they had the lock combinations.

Powell County Attorney Lewis Smith said the Road is located on1896 maps, and that would have been the route in place between 1900 and 1907 and what established it as a county road.

On a sunny summer day, county commissioners Rem Mannix, Dan Sager and Doug Crachy, GIS Coordinator Ricki Bauer, Lewis Smith, Sheriff Scott Howard, Avon historian Jack Price and this reporter took a slow, at times very bumpy, "drive at your own risk" journey in an attempt to find the historical road through the WMA.

Using a GPS locator, the group traveled up Jake Creek Road and through the Johnson property to the WMA border.

County Attorney Smith said, "This is a case where if the commissioners cannot work out a deal with FWP to alter the location of the road it will end up in court to locate the migration of this road. That is pretty important too because there has been a lot of migration of the road."

The Mullan Road was used as a stage road from Elliston to Deer Lodge crossing the highway at Rock Creek Cattle Co. and continuing west to New Chicago, South of Drummond.

In places the road has migrated as drivers made a new rut when the land was soggy – sometimes these ruts are 6-10 vehicle tracks wide. At other times, the old road is now just across the fence on private property. Elsewhere logging roads were built and became the ones people use(d).

As the group neared the reservoir, Jack Price recalled how the dam built by Wm. Kimmerly washed out in June 1953 with mud and debris carried as far as Hwy 12. When Dan Davis built the new dam, he put it in about half a mile further up the gulch. The old stage road goes through the upper portion of the reservoir.

Smith said, "It makes more sense to stay on the road where it migrated to and is the most practical. It may be more practical, but whether that can be done is the question."

Commission chair Rem Mannix said, "We pretty much offered to stay on existing roads if the FWP would agree."

For more information – Lt. John Mullan's "Report to the War Department" is on file at Wm. Kohrs Memorial Library.

Appendix F

Sheep and Peter Pauly

Spotted Dog Work Group
by Pat Hansen

Before 1880, the first sheep were trailed from Oregon to the Avon area by Alfred Kimmerly and a Mr. Miller.

By 1890, Dan McKenzie had added 11 railroad sections to his original 160-acre claim seven miles south of Avon on Spotted Dog Creek (currently known as the Pauly Ranch) where he ran three or four bands of sheep.

Running a band or more of sheep (one band consists of 1,000 ewes) required a good herder because the sheep grazed large, unfenced areas and needed to be protected from predators and contained within their own boundary. Many of the sheepherders came from the "Old Country" of Spain and Romania. Over the years, it became harder to find good help – it took a special man who did not mind the solitary life with only the companionship of his horse and dog.

*****

Montana was not yet a state when Henry B. Davis first came west from Missouri in 1881. While he was living and working in the Deer Lodge Valley, Davis wrote letters to his family in the east extolling the beauty and potential of this area. He decided to make his home here and encouraged family members to join him.

Charles H. Williams and his wife, Allie, came west with the Williams-Albee wagon train in 1883. Soon after their arrival, Williams established a homestead west of Deer Lodge and in 1885 he and his brother-in-law, Davis, became partners in the sheep business under the name of Davis and Williams. This proved to be a mutually pleasant and profitable relationship.

Davis and Williams raised 12,000 sheep and held title to about 10,000 acres of land and leased about 6,000 acres of state lands, all located in Powell County north of the city of Deer Lodge.

Peter Pauly was born in the village of Sarrance, near Pau, in southern France. He came to the Deer Lodge Valley in 1889, at the age of 17, to visit his uncle. The country fascinated him and he believed it an ideal land for raising sheep, and decided to settle here.

A shrewd and frugal man, Pauly worked for Davis & Williams and took his wages in sheep. During the summer he collected wool caught on fences and sold it in the fall. By careful saving, after three years he had enough money to buy 1,000 sheep of his own.

During the panic of 1893, wool sold for 7¢ a pound and Pauly learned a lesson about getting into debt.

He said, "I saw so many sheepmen lose everything just because they owed a small amount that I made up my mind I'd never go in the hole. And I never did."

By comparison, during World War I, wool sold for 62.5¢, an indication that times don't stay bad.

In 1895, Williams and Pauly formed a partnership and developed a ranching operation that became an international name among sheepmen. During the next 50 years, the Williams & Pauly Outfit grew into one of the largest livestock operations in the northwest comprised of five main ranches of about 80,000 acres with another 80,000 acres on lease.

Pauly was astute in the ways of sheep and of men. He said factors to make a success of the sheep business were: "First of all, plain hard work, and then knowing how to handle sheep so they will produce the most for the feed you have. Never overstock your ranges. The range is a sheep's dining room. We make it a rule never to let sheep eat over 75 percent of the grass on any range."

At the time, sheep were raised primarily for wool. No lambs were sold; two and three-year olds were sold for mutton.

Appendix F continued

Pauly Place on Spotted Dog WMA, 2017.

Realizing they needed better stock, in 1902 Pauly made an extensive study of leading flocks of sheep in Michigan and Ohio. As a result, he purchased four carloads of registered Rambouillet breeding ewes which were the basis of the Williams & Pauly operation. Their sheep averaged 12 to 14 pounds of wool per sheep, compared with less than six pounds in the early days. The firm became the largest producer of purebred Rambouillet sheep in the United States. Their sheep sold from the Canadian to the Mexican border and for more than 50 years sired many of the best flocks of the West.

Realizing it was impossible to make a profit and still pay $10 a ton for hay, about 8,000 tons of hay and 25,000 bushels of grain were produced annually on the Williams & Pauly ranches.

Part of the original Grant-Kohrs Ranch, the land Rock Creek Cattle Company sits on, was part of the Kohrs and Bielenberg Land and Livestock Company that was sold in three large parcels after the dissolution of the Grant-Kohrs cattle empire. The land east of the original ranch house was purchased on July 1, 1919 for $100,000 by Williams & Pauly.

Williams and Pauly became interested in banking and, with other associates, established the Deer Lodge Bank and Trust Company in 1921.

Williams was a man of integrity, well respected, and a man who worked for the good of all. He was a state senator and for 26 years was president of the Montana Woolgrowers Association. Williams' daughter, Bessie, married Frank Tavenner.

Williams died at the age of 82 in August 1938. Operation of the ranch passed into the hands of Ray Williams in partnership with Peter Pauly.

In 1949, the partnership between Williams and Pauly was amicably dissolved and it became Williams & Tavenner, operated by Don and Bob Tavenner and their uncle, Lee Williams. They retained the home ranch, the Anderson and Meade Creek properties.

Pauly retained the Spring Ranch, the Company Ranch at Helmville and the Spotted Dog Creek property south of Avon.

Although Pauly, his wife Mary Jane (Peucheu) and their family never lived on the "Pauly Ranch" located on the Spotted Dog WMA, he continued to run sheep and raise hay on the property. He was an active member of the Montana Wool Growers Association, serving as president in 1938.

Pauly's death at age 81 on May 6, 1953 elicited the following editorial comment: "When many hundreds of friends of the rancher, financier and industrialist paid their last respects to Mr. Pauly…they recalled chiefly that he was a kindly man, deeply devoted to his family, his friends and church.

(Sources: Where It All Began; Our Neighborhood; Silver State Post; Agricultural Digest)

Appendix G

Don Davis Interview

Spotted Dog Work Group
by Pat Hansen

Don Davis, 90, was born and raised at Blossburg, northeast of Elliston one of four kids in the family. His family moved to the Avon area in 1944 and Don went into the Army in 1945 and served for a year in Korea.

Don started working for the Tavenners on April 16, 1967 as a cowboy, but also helped hay, irrigate and build fence. At the time, Don, Ava and their boys lived in Deer Lodge.

The cow foreman, Howard Robbins, worked with the general manager. I was hired to work under the general manager to supervise haying, fencing and irrigating. There were up to 20 employees in the summer. The ranch had 125,000 acres of deeded land when I went there, but Tavenners did not have the ranch was fully stocked. They also had a dairy, milking 100 cows.

Don explained that originally the Spotted Dog WMA property was owned by Williams and Pauly, then when they split it became Williams and Tavenner.

Tavenners kept the home ranch, Meade Creek and Anderson properties; Pauly kept the Spring Ranch and Spotted Dog.

Pauly raised sheep and had three bands, each with approximately 1,000 head of ewes, that sheepherders herded in the Clark Canyon and Spotted Dog area, moving back and forth according to the season. At times they also trailed them to the Charlie Rice place north of Avon. The bucks (rams) were at the ranch late in the fall.

My Dad took care of the Cattlemen's Grazing Association on Big Dog Creek and Blossburg areas. We did a lot of riding, and would stop at the Pauly camp-tender's camp in Clark Canyon, he said.

Sheepherder monuments - Don said there is large one not far from the Old Stage Road, and another one near the microwave towers, northeast of the big one.

I assume they were built by the sheepherders to pass the time of day, he said.

In 1954, I helped pour the concrete when my brother built the dam on Spotted Dog creek after the original dam washed out during high water in 1953 carrying debris clear to the railroad track in Avon.

Logging has changed the look of that country over the years coming in from the Avon side, he said. The Tree Farmers' road was built in 1956-57. I could see the lights of the Cats working on the road in the early morning. Tavenners logged the area and sold a lot of Douglas Fir. At that time they used chain saws and skidders, not the big cutters they have today.

Gene Boger had a small sawmill on Carpenter Creek, and if Tavenners needed lumber for building, they had Boger cut it.

When RY Timber owned the property they harvested a lot of the timber that was there.

A Boise Cascade home was moved onto the Pauly ranch property in 1974. Ranch employee Don and Juanita Shonka lived there starting the winter of 1974-75. Later Ron Glick lived there until he was killed in a Caterpillar accident.

Shonka and Glick each hayed the Pauly place when they lived on the property. The 250-acres of native grass hay was flood irrigated, cut with a tractor mower, baled in small bales and fed at the Pauly ranch. One year we put up 12,000/80 lbs. bales (480 tons); but it varied by the year.

Beavers caused a lot of grief at times; but their dams do store water. There have been beaver dams on the property for as long as I've known. I have no knowledge of trapping beaver on the Pauly place - although Shonka might have killed some that were building dams in the ditches.

There were willows along the upper reaches of Trout Creek. One little draw with quakers (quaking aspen) along the fork of a stream above the reservoir, near Mosier's, had a trickle of water. The beaver clear cut all the aspens and built dams but then they left.

As a young man Don didn't hunt a lot; and not on Spotted Dog although he hunted there a lot in later years while working for the Tavenner family.

For as long as I can remember, Spotted Dog has been noted as elk country. I don't have any idea how many total elk there were. I never saw elk on the Blossburg side until I was 15-years-old.

During the time I was managing the day-to-day activities on the ranch, it was not unusual to see a few Whitetail and

Appendix G continued

Mulie deer. There were a few moose and black bear; only one grizzly was taken that I know of, but I never saw one.

The property was open for hunting while Tavenners owned it, but it was not open to public after Louis Ward, of Kansas City, purchased the property in 1972.

(Despite Ward's deep affection for the ranch, the death of the family patriarch, Lou Ward, forced his three children to sell assets to pay federal estate taxes.)

Ross Adam of Canada purchased the ranch in 1999; it was later sold to Ray Yonke, owner of RY Timber; and Bill Foley owned it until it was sold to FWP in 2011.

When wolves were reintroduced in the 1990s it was touted as necessary to do so to restore the balance of nature. At that time biologists said once 10 breeding pairs were established in the Greater Yellowstone area, they could be taken off the Endangered Species list.

When we took the cattle out of Spotted Dog one year, the wolves had been bothering them and we were short 65 calves. A number of other ranchers – Benson, Donny Beck, John Price and others also lost cattle to wolves. FWP took 22 wolves out.

One time when I was hunting, I saw 11 wolves trailing one behind the other.

Water – there is really good stockwater most anywhere with the North, Middle and South Forks running into Spotted Dog Creek- the main stream, and there are some springs. Freezeout, Jake Creek, O'Neil and Fred Burr play out late in the summer. Trout Creek has dried up, but the main fork of Spotted Dog has never gone dry.

I did not see serious erosion along the streams. Spring high water washes more soil downstream and erodes stream banks more than any cattle. They (officials) don't think about the damage high water does. It cuts the banks really bad, but they won't let you rip rap. I think that has to be done, but not with old car bodies. There was some erosion on trails, but they have been used for several hundred years by livestock and wildlife.

Fishing – There was good fishing for small cutthroat trout in the creek near the field and buildings at the Pauly place. My brother had a boat, and in the pond formed by the dam there were 2-3 lb. cutthroat trout.

Grazing management – When Tavenners owned it, there were four or five pastures that were rotated, and that continued somewhat during the time Ward owned it. But in the last few years it has been pretty much open as the fences were not kept up.

Tavenners calved the end of March and early April; in later years calving was moved earlier to the end of February and early March.

We built a calving shed on the east side when Ward owned the ranch. After they calved, we turned pairs out on the hill in the O'Neil Creek area. We moved them to pasture June 1 and the cows worked their way back in to the Spotted Dog Creek area.

After weaning, the cows were brought back to the Pauly ranch and Shonka would feed them, then we'd bring them back to Deer Lodge about calving time.

We used to have a lot more snow in the winter and that made a difference. In 1973 we had a severe drought and grasshoppers, but not as bad as the Avon area. We also had a streak of dry years in the late 1980s and early 1990s when it was extremely dry.

Yonke's priority was the timber, but he had good management for cattle, too. This owner's priorities are a lot different.

The biggest challenge was the farming each year of 800 acres of oats and hay barley. We had a lot of alfalfa but we turned it into grass hay; converting 6500 acres in two years. It was irrigated with 35 center pivots, 36 wheel lines, and a lot of hand lines. The sprinkler project involved 6,500 acres and allowed us to get 2,000 more acres in irrigated land than under flood irrigation. The sprinklers required more people, but we put up more hay. Over the years there were many, many good people who made it work for me.

My son, Tom, took over my job in 1996 and we moved to town. For about four years I continued to work eight or nine months of the year – especially during calving and branding.

I felt fortunate over the years. Tavenners were great people to work with; the Ward family, Yonke and RY Timber treated us well.

Appendix H—Public Comment

FWP and the Work Group offered this Habitat Plan for the Spotted Dog Wildlife Management Area for public comment from 8 November to 8 December 2017, and also obtained comments at a public meeting in Deer Lodge on November 30, 2017. Appendix H contains the substance of those public comments for future reference and consideration as the plan is implemented.

	Comment	Name
1	Pleased to see you realize the importance of allowing access along the old county road that runs through this area. Historical information concerning Mullan Road and the Indian trail needs to be documented which requires access to the area. I have spent several days covering some of this ground on a bicycle and would appreciate being able to use a pickup or an atv for the longer stretches from access points. I have found the Indian trail and original road vary in location from the more modern "Stage" road in many places. I am anxious to see the results of your management plan.	Little, Gary
2	Manage for wildlife, sportsman access and opportunity first and foremost. Any other activities (such as livestock grazing) should be secondary and only considered if shown to be a benefit to wildlife habitat.	Foster, Aaron
3	The Big Sky Upland Bird Association (BSUBA) has been organized for over 30 years as a non-profit organization in Montana dedicated to habitat conservation and hunting opportunity for all upland game bird species in the state. We are supportive of MDFWP's stated goals of managing habitat of the Spotted Dog WMA (SDWMA) for the benefit of wildlife, habitat and species diversity, and wildlife related recreation. At nearly 60 square miles, the SDWMA has the potential to provide high quality hunting for a variety of species, and a significant number of hunter-use-days. However, we note that while there was assessment of songbird diversity on the SDWMA, there is only very limited discussion of the upland bird species of the SDWMA, and no measures explicitly designed to conserve or enhance upland gamebird habitats or populations. We find this a significant oversight given that upland birds such as Ruffed Grouse, Dusky Grouse, Merriam Turkey, Gray Partridge, and potentially Sharp-tailed Grouse, could use and thrive on this important tract of intermountain grassland habitat. It should be anticipated that the region's upland bird hunters will use the property extensively. Regarding habitat, all grouse species would benefit from management to enhance aspen stands and shrub such as willow, birch, chokecherry, rose and serviceberry. Dusky grouse and turkey would benefit from management for some old growth Douglas fir and Ponderosa pine for winter and roosting habitats. As ground nesters, all upland game birds would benefit from management for residual native grass cover, habitat features influenced by both elk population objectives and livestock grazing intensities. Related, we commented this August regarding the control of conifer expansion and native grassland restoration across nearly 3,000 acres of the Blackfoot Clearwater Wildlife Management Area (BCWMA), because of the high potential for the project to increase the preferred habitat (conifer-free grasslands) for Sharp-tailed Grouse (Tympanuchus phasianellus). BSUBA has been engaged for several years with MDFWP staff in efforts to plan for, and ultimately implement, restoration of Plains Sharp-tailed Grouse to western Montana's valleys. The upper Blackfoot Valley was the last known location supporting a breeding population in western Montana until 2000 (Deeble 1996). A new plan to reestablish Sharp-tailed Grouse in western Montana has identified evergreen tree encroachment into grasslands as the principle ecological barrier to sharptail reestablishment (McNew et al. 2017). The Blackfoot Valley near Helmville could become a primary reintroduction area, and the grasslands at the Spotted Dog WMA only thirty miles to the southeast, if conifer expansion is controlled, would also support reestablishment and connectivity of this highly mobile grouse species to historic range and to extant populations eastward near Helena.	Deeble, Ben Big Sky Upland Bird Association (BSUBA); president

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	It should also be noted that any habitat enhancement projects which benefitted upland birds on the SDWMA could potentially be funded with monies from FWP's Upland Game Bird Habitat Enhancement Act, a pool of funds generated by the sale of upland bird hunting licenses.	
	Clearly any final habitat management plan for the SDWMA would benefit from expanded evaluation and discussion of upland bird habitats, populations, and management direction compatible with maintaining and enhancing habitats and hunting opportunity for upland bird species.	
	References:	
	Deeble, B. D. 1996. Conservation of Columbian sharp-tailed grouse, with special emphasis on	
	McNew, L.A. 2017. Restoration Plan for Sharp-tailed Grouse Recovery in Western Montana, May 2017. Montana State University, Bozeman MT. 99 pp.	
4	The major flaw in this plan is the repeated references to the use of cattle grazing to "improve forage conditions for wildlife". This theory is 95% B.S. Grazing is not a tool it is always problem. It is amazing to me that in spite of the report from Hansen which documents the damage done by years of abusive cattle grazing to this landscape that anybody would continue to push this crackpot theory that somehow livestock is beneficial to wildlife.	Frasier, Stan
	The people of this state do not want public money spent to buy another damn livestock pasture.	
	The report states: "maintain fences to minimize livestock trespass","keep livestock out of riparian areas", "protect bitterbrush from livestock grazing", "In Alberta, succession to a near climax state of rough fescue requires more than 20 years of rest after disturbance by intense grazing." The best way to achieve these goals is **no grazing!**	
	In order to accommodate livestock, interior fencing would be needed that is expensive and cre-	
	It would be nice to be able to recreate on public lands without tripping over cow pies.	
	Prohibit trapping and introduce beaver.	
	And finally, **NO LIVESTOCK!**	
5	Although it has taken almost seven years for FWP to get to the point of proposing a formal management plan for this WMA we are supportive of the process that has gotten us to this point. We are especially pleased that the EIHA by Hansen was completed prior to any effort to develop a plan. The management of this WMA should be guided by the science documented in this report.	Marchion, Chris; Anaconda Sportsmen Club
	While we have a lot of agreement with the contents of the proposed plan our disagreements have to do with the departure from science and departure from FWP standards.	
	While we could be convinced that grazing by domestic livestock on the WMA maybe a part of a management plan we are concerned by a lack of safeguards for the WMA. The EIHA identified areas which should never be grazed as well as substantial areas that would need complete rest for periods of as much as 20 years. We would oppose any livestock use on any of those identified areas until there is scientific evidence that grazing is now appropriate.	
	In addition any domestic grazing on the WMA should provide a primary benefit to the wildlife objectives of the WMA and not for economic incentives or pressure to satisfy agricultural interests.	
	The plan has a good discussion about the viability and availability of a number of fish and wildlife species with the exception of ungulates which only seems to consider elk, which are abundant. We urge equal consideration for antelope, deer, and moose. In HD 215 there appears to be a long term problem with the quantity and age structure of mule deer. While this problem is unlikely to be related to habitat we need to make sure we use this property to contribute to the long term solution of this problem and not in a manner that aggravates the situation.	
	The plan suggests that shoulder hunts may be considered to address the elk overpopulation in HD215. We absolutely object to any such consideration. A primary reason for the WMA is to provide a safe place for wildlife during critical habitat needs and reduce conflicts from wildlife on private lands. Late season hunts are contrary to this objective.	

	We support the objectives to protect and enhance the existing pure strain cutthroat populations,	
	We urge the removal of any existing interior fencing which is no longer of value and presents a liability to the movement of wildlife on the WMA.	
	We look forward to the completion of the external fencing to keep out trespass livestock especially since it is exasperating the recovery of the WMA.	
	Because the travel plan is new and opportunities for changes are limited, we do not have any comments at this time. We suggest we review travel as we can determine the public's needs balanced with wildlife security. This won't be known until the public's interest in access has developed further and the wildlife adjust to a restored and secure landscape.	
6	Montana Backcountry Hunters and Anglers (MT BHA), representing over 1000 Montana resident hunters and fishermen, is pleased to have the opportunity to participate by providing comments to the recent Draft Spotted Dog Wildlife Management Habitat Plan 2017. Because MT BHA values both the resources and the management direction, we have previously commented management re Spotted Dog WMA (10/29/13, 11/29/13, 2/14/16, 10/3/16, 10/18/16, and 7/25/17) and have occasionally attended the meetings of the Advisory Committee. We are deeply committed to a Plan that optimizes wildlife and fishery resources on a sustainable basis.	Munther, Greg; Montana Backcountry Hunters and Anglers; board mem-
	We support many of the aspects of this Draft Plan. We agree with the Purpose and Need, the Statewide Goals, and the Goals specific to the WMA. It is important for the Plan to clearly reflect in management direction that the Purpose of the purchase of Spotted Dog WMA was to replace lost or injured natural resources via Montana vs ARCO, and to permanently protect fish and wildlife resources. We wish to clarify that this WMA, based on the stated rationale for purchase, needs to protect all native fish and wildlife species and resources, not just elk and deer.	
	We note that the last official look at the Elk Management Objective number was in 2008 but in 2010 the public took ownership and designated FWP to manage nearly 40,000 acres of the primary winter range for elk. It would therefore seem appropriate as part of a Habitat Plan that FWP calculate the now-public Spotted Dog WMA's carrying capacity for elk. That WMA carrying capacity, when combined with carrying capacity for other public winter ranges in the appropriate herd units would be an important element in future discussions re appropriate elk management objectives. We are assuming that past grazing impacts under private ownership reduced carrying capacity for elk and other species on Spotted Dog, but that an improved management strategy and decisions should increase present capacity for elk and deer, as well as other species, while reducing conflicts with adjacent private lands.	
	We request that riparian areas, including seeps and springs, given their unique vegetative composition and disproportionate value to fish and wildlife, be separated into a separate management unit, with separate management direction.	
	We are appreciative of the past decision to complete a high quality vegetative and condition inventory and analysis using Dr. Paul Hansen. Projected and subsequent monitoring of vegetative composition and condition should be part of the equation for any proposed management action that could negatively alter plant composition or condition.	
	It is important to state in the Plan why you are proposing to focus on beaver restoration. We assume you have highlighted beaver because they serve as a restorative tool and keystone species for many aquatic and terrestrial species, but this rationale is not so stated in the Draft.	
	The State Lands inholdings in the WMA are a unique issue that compounds management and increases management costs, and the recent efforts to resolve these in the recent land purchase proposal is appreciated. We support this proposal and hope this purchase will be successful. It also may be worthwhile to identify private lands in and around the WMA that would improve management for both FWP and private landowners if exchanges or purchases for those lands could occur.	
	The Draft's stated potential for WMA livestock grazing is perhaps the "elephant in the room" that needs considerably more explanation and clarity as part of this Plan. While we do not object to specific livestock grazing for site specific purposes, priority for this WMA must be sustainable habitat for all species of fish and wildlife first.	

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What specifically is intended by "Consider prescribed cattle grazing to add vegetative community structure in grasslands other than designated rough fescue reference sites, and as a tool for achieving grazing improvements on privately owned bunchgrass communities as well"?
At what scale is grazing intended across the WMA?
What current plant community condition would trigger grazing on the WMA?
What is the target plant community structure that grazing would promote that cannot occur without livestock?
Because domestic livestock grazing is often attributed to creating conditions to the spread and dominance of cheatgrass, how will grazing be managed to be consistent and not in conflict with the priority direction "*Watch cheatgrass distribution and avoid creating niches for cheatgrass expansion"? It should be noted that P Hansen's plant evaluation documented cheatgrass has already infested each of the management units to varying but significant degrees. Although MU 1 may have the greatest density of cheatgrass, the other Management Units have sufficient density and distribution to explode if disturbance occurs. Both grazing and fire are primary mechanisms for accelerating the spread of cheatgrass. A similar issue is present with the widespread distribution of knapweed. Considerable analysis of the short term vegetative condition weighed against the potential for permanent degradation of native grasslands via invasive species must be an upfront and deliberate decision as part of this Plan.*
Because all species of wildlife are important on the WMA, how would predators on the WMA be treated in the presence of livestock predation? Would presence of livestock and associated activities modify the presence, density and distribution of predators? If so, the Plan should address how livestock/predator conflicts would be resolved.
The justification for livestock grazing of the WMA appears to be, in part as "*a tool for achieving grazing improvements on privately owned bunchgrass communities as well". Specifically, what privately owned bunchgrass communities need improvement? Will there be measurable contract obligations with a WMA grazing permittee to achieve specific grasslands improvement results on their lands and how would that be evaluated? Will measurable contractual long term hunter access be part of any agreement with a grazing permittee? How, and under what conditions would a permittee be selected to graze the WMA? Would past livestock trespass issues be a selection criteria for not choosing a permittee?*
Monitoring (p 30) references use of "*pastures". This leads us to believe FWP envisions regular large scale grazing on the WMA. If this is true, what is the scale of these "pastures" and where are they to be located? Does reference to "rotate treatments" (p 35) refer to rest-rotation grazing system? If so the Plan should so state each grazed area's plant community goals and explain how this treatment plans to achieves those goals and what evauation process and monitoring frequency will be used.*
If grazing infrastructure, other than WMA boundary fences, is envisioned, would sportsmen or other public funding be used to construct or maintain these fences or water developments? We would advocate instead, if the decision to graze moves forward, advocate for temporary electric fences and portable water tanks provided by the permittee with the responsibility for containing livestock solely up to the permittee, and that renewal of any grazing permit be premised on satisfactory containment and distribution of livestock.
We support completion and maintenance of the WMA boundary fence as the only viable way to control unauthorized livestock.
"Healthy with problems" was a common diagnosis by P. Hansen for current condition of riparian areas. Dr. Hansen focused on plant community health, but our observations also confirm that livestock related streambank structural issues exist as well. We believe the streambank structural deficiencies should be recognized as part of this Plan as well, in addition to vegetative condition.

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If grazing were to occur, how would riparian areas, including all seeps and springs be protected from livestock? We are disturbed by the Draft's common use of the term "*unauthorized livestock" when discussing riparian areas, inferring authorized livestock may be permitted in riparian areas if they are under a permit. We can see no rationale for allowing any livestock grazing on any spring, seep or streamside riparian area in this WMA. WMA riparian areas continue to be damaged by trespass cattle. In 2016 and 2017 multiple members of our organization witnessed significant numbers of livestock concentrated in riparian areas of several drainages. These riparian areas are relatively rare or uncommon on the WMA and support a disproportionate number of species of wildlife, and of course, all aquatic obligate species. In addition past grazing and current trespass grazing has left them damaged and fewer palatable shrubs. Riparian areas, including seeps and springs, are attractions for livestock and are almost always overgrazed before uplands have significant livestock use. Have all seeps and springs within candidate grazing areas, in addition to streamside areas been inventoried and recognized as disproportionately important to this WMA? Draft management direction (p. 42) to "plan to fence livestock out, using portable, temporary fencing <u>whenever feasible and appropriate(</u>emphasis added<u>)</u>" is insufficient to protect this uncommon and disproportionately important habitat. Successful fencing of <u>all</u> riparian areas, seeps and springs should be mandatory criteria before that area can be grazed.*

"Healthy with problems" was a common diagnosis by P. Hansen for current condition of riparian areas. Dr. Hansen focused on plant community health, but our observations also confirm that livestock related streambank structural issues exist as well. We believe the streambank structural deficiencies should be recognized as part of this Plan as well, in addition to vegetative condition.

We support the proposal to designate campsites and prohibit camping elsewhere to minimize wildlife disturbance, reducing weed spread, and creation of off road disturbance.

While we appreciate the identification of interpretation needs and opportunities, we are concerned about cost, effectiveness, and vandalism. We support more interpretation that does not require expensive capital costs nor maintenance, such as up to date accessible, informative and up to date website sources and use of local docents as guides for interested groups.

We appreciate the recognition and general commitment to Species of Concern. Despite the commitment, the Draft Plan lacks a complete list of species of concern known to exist on the WMA. While the Draft has a few examples of Species of Concern, we request a list of known species of special concern be included in the Plan, and some assessment and direction on how

Since large conifers on the WMA are in short supply and important to a number of WMA cavity nesting species, we believe specific direction is needed beyond prohibiting firewood gathering for off WMA use. We urge that no firewood cutting be allowed for any standing trees and that only dead and down may be used for on-WMA-only use. The Draft Coniferous Forest section properly identifies protecting snags and snag recruits, but does not specify that wood cutting of snags or snag recruitment trees is prohibited if used within the WMA.

We appreciate the discussion and draft concerns related to invasive plant species (p32). Invasive plants are perhaps the largest threat to sustainability and capacity. With 22 species of noxious weeds occurring on the WMA already, this should be the paramount discussion of the Draft. What specific actions will be used to assure new species will be prevented from finding their way to the WMA? There appears to be a need in this Plan to initiate a cooperative, landscape scale program on surrounding lands to contain any new invasive species, as well as land use, travel or livestock practices that threaten to introduce new species. Controlling hay or recently fed livestock from other locations, dirty vehicles, disturbed soil areas, and other conditions and sources, and including prioritized spraying or other preventative or rapid controls need to be part of this plan. The Plan should include as assessment of the WMA vulnerability to spread of each listed invasive species and target control of those species with high potential for spread and negative effects when their existing distribution is currently limited and controllable.

	We question both the need for and appropriateness in a "*Habitat Plan" that specifically deviates from habitat to provide direction for winter elk hunting. This hunting direction is in conflict with confining this Draft to a self-described "Habitat Plan", especially after this Draft chose to omit a discussion of Elk Management Objectives. There is no supporting evidence offered that present elk numbers are damaging WMA habitats. The presence of elk using public winter ranges purchased in large part for their winter range values should be welcomed. A late hunt scenario would likely contribute to redistributing elk onto private lands, in conflict with direction elsewhere minimizing elk damage to private lands. How a late season elk hunt would occur without displacing elk off the WMA needs more explanation or specificity. A 2016-2017 FWP document describing shoulder seasons prefaced the table with a description of shoulder seasons as follow: "A shoulder season is a firearms season that occurs outside the 5-week general firearms season. The seasons focus on antlerless elk harvest on* ***private land*** *(emphasis added) and are not intended to replace or reduce harvest during the existing general archery and 5-week general firearms season." We are opposed to any shoulder season on Spotted Dog WMA. Other options exist to increase harvest, if necessary, during the regular seasons. There has not been documentation provided that current elk numbers are exceeding carrying capacity of the WMA.*	
	We understand that this Plan could be approved without involvement by or approval of the Fish and Wildlife Commission. Without Commission approval, does this plan have the FWP commitment necessary for the public to be assured of long term management direction for Spotted Dog WMA?	
	We look forward to participating in future management of Spotted Dog WMA.	
7	Thank you members of the Spotted Dog Working Group and DFWP employees for the work you have done in drafting this proposed plan. Spotted Dog deserves our attention and action; however, we must proceed with caution. The biggest threats to our success will be the actions taken for purposes other than protection and enhancements for wildlife and wildlands.	McCarthy, Charlie
	Threat 1 -- Proposed opening of the Old Stage Road by Powell County Commissioners. This road was closed by previous private landowners but was never formally abandoned by the county. It is my understanding it is still legally an "open" road. For more than 40 years the road was closed by private landowners without objection, now that these private lands have been transferred to public ownership, the county wants to reopen it for multiple purposes, some of which are in direct conflict with the purposes of this Wildlife Management Area. The same is true of an access road to the fishing reservoir. How would this road contribute to the preservation and conservation of the fish and their habitat? For certain, snowmobiles and ATV's should not be allowed on the WMA. If an individual cannot walk or cross country ski on the WMA in winter, why are members of the Working Group or County Commission considering allowing snowmobilers to "cross the WMA," especially through the heart of the winter range (Jake's and Freezeout).	
	Threat 2 -- Failure to integrate DNRC and FWP lands within the WMA. DNRC lands are governed by statutes and rules that are at cross-purposes with the purpose and need for this WMA.	
	Threat 3 -- Allowing for domestic grazing on the WMA. There is a lot of nostalgia for the return of Spotted Dog to its recent historic usage, particularly among members of the Working Group. The logging, mining and grazing activities of the past must be replaced by preservation of wildlife and their habitat if the WMA is to be successful. The Working Group membership should reflect the nature of the work to be accomplished by the WMA plan (specifically wildlife and wildlands specialists and volunteers) and not be dominated by groups or individuals who have motorized use, logging, mining, grazing or other purposes that conflict with the purposes of the WMA.	
	Threat 4 -- DFWP failure to be proactive with the recovery of the wildlife and lands resource. It is great to see the attention paid to the Paul Hansen Assessment. Actions must be guided by science. The infrastructure currently present on the ground that is not serving the purposes and needs of the WMA should be removed. Leaving old buildings, foundations, and equipment to the forces of nature is out-of-step with the current and future purposes of the WMA. We purchased the WMA with intentions of moving forward, not looking backwards.	

	This means, too, that FWP should remove the wildlife traps when they are not in use. If FWP does not have funding or manpower to remove infrastructure, FWP should recruit volunteers to do so. FWP should only provide additional infrastructure guided by its need by wildlife and habitat. In other words, be considerate of the resources when installing signs or developing publications. It is too soon to be thinking about trail development on the WMA.	
	The entire Appendix should be preserved elsewhere other than in the Wildlife Management Area Habitat Plan. As mentioned, this is a forward looking Plan, not a reflection of days gone by.	
	In closing, I am convinced we can and will do better for the wildlife and habitat on Spotted Dog WMA. The proof is already visible on the landscape. This Plan is a good start and will help guide future actions.	
8	On behalf of Hellgate Hunters and Anglers (HHA) and our 300+ members we respectfully submit the following comments regarding the draft management plan for Spotted Dog Wildlife Management Area. Since the property was acquired, HHA has provided input and has remained very interested in the future management of this property. Many of our members hunt and recreate on this property regularly and we are deeply committed to developing a plan that prioritizes fish and wildlife values on the WMA.	Fischer, Kit Hellgate Hunters & Anglers; president
	Public Access: The existing access on Spotted Dog WMA allows for both good wildlife security and dispersed recreation. While the access points and interior roads are few, the trade-off is good elk security and long walks to find elk. This is especially important in open country like Spotted Dog where elk and other big game species lack the escape cover and heavy timber present in most WMA's in western Montana. There has been ongoing discussion about opening access up again at the bottom of Jake Cr. as well as the old Mullan trail that bisects the property. HHA would oppose additional access into the WMA unless offset by additional closures. We know well that big game prefer to be as far from roads as possible, especially when canopy cover is sparse. As is the case for Spotted Dog- while a few road hunters may prosper with a short term gain, the long-term impacts of increased road density will have an adverse impact on elk staying on the WMA. We recommend the department increase signage of open/closed roads as well as parking and camping areas to minimize off-road activity. We also recommend that FWP work with MT DNRC to allow camping on state school trust lands on the WMA. In addition, if access is provided to neighboring landowners for cooperative use, they are bound by the same access limitations as the rest of the public – no special access should be granted to any member of the public through a locked gate.	
	Elk Management: HHA strongly believes that the elk objective in HD215 needs to be re-assessed since the purchase of Spotted Dog in 2010. Spotted Dog added an additional 40,000 acres of high-quality (primarily winter range) for elk. We recommend the Department calculate what the carrying capacity of the WMA is and add it to the current objective. While we understand the challenges associated with managing such a large number of elk, we also believe that the increased forage and winter range should provide the opportunity for a growing herd. With the existing liberal regular season opportunities and the shoulder seasons on private lands adjacent to the WMA, we believe the department has provided ample opportunity to manage the population. HHA would not support late season hunts on the WMA as a means to further manage the population.	
	Other Species of Interest: We are heartened to see a mention of pronghorn and mule deer on the WMA. We would recommend the Department work to grow these populations and offer high quality hunting experiences as populations allow. In addition, we recommend the Department consult with their upland game bird biologists to enhance existing populations of Hungarian Partridge and consider the historical range of native grouse on the WMA (including sharptail). Many of these upland bird species (as well as big game) depend on aspen, chokecherry, elderberry, and kinnikinik to flourish. Have these plant species been inventoried? Does the department see Spotted Dog as an important habitat linkage for NCDE and GYE populations of grizzly bears?	

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Fisheries: Spotted Dog has several important streams that contain native cutthroat trout populations. We encourage FWP to minimize stream damage by restricting livestock access to these reaches and to prioritize riparian restoration to improve spawning habitat. Some of these streams contain brook trout – we would support the removal of brook trout to benefit native

Riparian Areas: If grazing were to occur, how would riparian areas, including all seeps and springs be protected from livestock? We are troubled by the Draft's common use of the term "unauthorized livestock" when discussing riparian areas, inferring authorized livestock may be permitted in riparian areas if they are under a permit. We can see no rationale for allowing any livestock grazing on any spring, seep or streamside riparian area. These areas are relatively rare or uncommon on the WMA and support a disproportionate number of species of wildlife and of course, all aquatic obligate species. In addition, past grazing has left them damaged and with fewer palatable shrubs. Riparian areas, including seeps and springs, are attractions for livestock and are almost always overgrazed before uplands have significant livestock use. Have all seeps and springs, in addition to streamside areas been inventoried and recognized as disproportionately important to this WMA? While we appreciate FWP will "plan to fence livestock out, using portable, temporary fencing whenever feasible and appropriate" we would like to see stronger protections of these areas. Successful fencing of all riparian areas, seeps and

We noted, "Healthy with problems" was a common diagnosis by P. Hansen for current condition of riparian areas. Dr. Hansen focused on plant community health, but our observations also confirm that livestock related streambank structural issues exist as well. We believe the streambank structural deficiencies should be recognized as part of this Plan as well, in addition to vegetative condition.

We applaud FWP in their interest to restore beaver to the WMA and/or mimicking beaver dams. Largely absent from the entire WMA, beavers play an essential role in creating upstream water storage benefitting a myriad of species from big game to amphibians, birds and fish.

Grazing: Grazing on the WMA is one of the most contentious issues related to future management of the property. We believe livestock grazing and wildlife can be compatible on public lands, but we also believe that wildlife remain the primary focus of the WMA and that grazing should only occur when it will have no negative impact on wildlife. We recommend interior fences be removed as quickly as possible to aid in wildlife movement and that an exterior boundary fence be constructed to as soon as possible to help control trespass cattle grazing. We believe future cattle grazing should only be done when native plant, tree and shrub communities have recovered from decades of abuse. This ecosystem did not evolve with the high levels of grazing that were present in the shortgrass prairie east of the divide, but we do appreciate that some grazing could be accepted on the WMA.

If grazing is permitted we would support prescriptive grazing permitted for a specific habitat treatment. Prescriptive grazing would likely change year to year in terms of the number of AUMs (duration, number of animals) as forage conditions allow. Term grazing, as granted in other WMA's through cooperative agreements, may benefit FWP through short-term wins with the neighbors, but may be a detriment to the long-term health of the range and may displace native wildlife. Prescriptive grazing could be achieved through temporary electric fencing for high intensity, short duration grazing treatments. HHA would not support the use of sportsmen dollars to manage a livestock grazing system on the WMA. In addition, we would not support domestic sheep grazing on the WMA as the likelihood for wildlife / livestock conflict is significantly increased. If livestock depredations occur on the WMA, we recommend that carcasses be removed in a timely manner and that predators (bears, wolves, lions) are not killed as a consequence of conflict on public land.

Invasive Plants: As Hansen stated in his report, non-native grass species in particular are the biggest threat to wildlife habitat on the WMA, namely cheatgrass infestation. We recommend the department coordinate with the local weed district, NRCS and other relevant state and local agencies to develop an action plan to address cheatgrass infestation and treatment options on the WMA as well as treatment options for other invasive plant species. How would increased access, livestock grazing, and fire effect the spread of invasives?

	Fire: How would FWP utilize fire, both prescribed and natural, as a habitat management tool on the WMA? How would fire impact the spread of invasive species or impact elk winter range? Would FWP allow some fires to burn if they posed no significant threat to private property?	
	Economic Impact: The economic impact of having such a phenomenal piece of wildlife habitat should not be understated or overlooked. Has FWP looked into what the economic impact Spotted Dog WMA has on the neighboring communities of Deer Lodge, Avon and Elliston? Hunters in particular are a significant economic driver for many small town communities and having such a resource in their backyard often pays dividends.	
	Thank you for the opportunity to comment and weigh in on this draft plan. We look forward to working with the Department on the long term management of the WMA.	
9	After studying the Spotted Dog Wildlife Management draft habitat plan, Rocky Mountain Stockgrowers (RMSGA) would like to go on record that we feel the Draft Management plan for Spotted Dog WMA (SDWMA) is far from being complete. First of all, the current goals in the management plan are very vague with no measurable objectives or benchmarks. For example, how does FWP benchmark sustainability for future generations or identify how FWP is being a good neighbor? Without measurable objectives, it is impossible to determine if the management plan is successful or even progressing as desired. The second area of concern is the lack of addressing grazing as a tool within the SDWMA. There have been several years of successful grazing management protocols put together on other WMA's around the state and to leave grazing out of the SDWMA draft management plan is not acceptable.	Conn, Dan; Matt Graveley; Joe Dippold; Brian Quigley; Rocky Mountain Stock Growers Association; president, vice president, director,
	For example, the Fleecer coordinated grazing program was implemented in 1988 and follows rest-rotation grazing principles. While we understand that it takes time to plan a rest-rotation grazing system, not having some sort of backbone within the SDWMA management plan is leaving it incomplete.	
	From the document that Michael Frisina and Forest Morin wrote "Grazing Private and Public Land to Improve the Fleecer Elk Winter Range," they state that the Fleecer coordinated grazing program is a practical solution to enhance forage quality and quantity by applying early spring cattle grazing, rest-rotation, grazing principles and integrated management of various land ownerships. Coordinated management resulted in substantially increased cattle and elk numbers, while resolving a land owner tolerance problem.	
	According to research by Michael Thompson and Karl Grover, both FWP personnel, "Factors Influencing Spring Feeding Site Selection by Elk in the Elkhorn Mountains, Montana," elk appeared to react favorable to previous cattle use in their selection of spring feeding sites. This was due to the removal of residual vegetation by cattle. Cattle grazing could also be easily manipulated to improve spring elk forage and may be a tool for land managers.	
	The Beartooth management plan (BTWMA) specifically identifies the objectives of their grazing rotation system: 1. by promoting maximum plant production, vigor and nutrient content. 2. Increase the attractiveness of late fall and spring forage to elk, thereby influencing distribution and minimizing depredation to other private lands. 3. Implement a long term, beneficial grazing system and by bringing adjacent landowners into similar management, simultaneously meeting landowner needs and tolerance.	
	Furthermore the BTWMA identifies that dates of grazing are dictated by plant phenology to include spring green-up, plant availability and seed ripening, forage consumption in active pastures and hunting and recreational demands upon the area. Flexibility is critical in effective operation of a grazing system of this magnitude and of such public interest.	

	The Beartooth management plan states that grazing on the BTWMA portion of the system has resulted in dramatic improvement in vegetation composition, compared to adjacent un-grazed portions of the WMA.	
	RMSGA believes that a blueprint for the SDWMA is already in place by using the models of	
	RMSGA realizes that there are several factors in developing a grazing plan that fits the needs of the SDWMA, from developing pastures, a grazing rotation scheme, to stocking rates, but we also need to start with the basics and implement the backbone of that plan into the current management plan. Background work has already been done by the citizen's advisory group on looking at soil survey maps to start determining stock rates and the amount of available forage that the property can produce. (Please see the attachment). FWP personnel have also met with several surrounding landowners and that feedback needs to be included.	
	Much of the public forgets that not only does domestic livestock consume pounds of forage but wildlife also consumes several pounds of forage a day both on public and private ground. If managed properly the two can work symbiotically and are a benefit not only to the resources buy to the habitat as well.	
	The questions that RMSGA proposes to this management plan and should be discussed further	
	Can we increase the number of one RENEWABLE resource (grass and range) of the WMA by	
	Can we increase the economic stability of our county and provide a resource for our agriculture	
	The key component to remember; Elk have wintered on this range for several years, wildlife has used this property for 100's of years but also domestic livestock have been a part of that habitat. The appeal of this property to FWP was for winter elk habitat as the primary goal and FWP has to take into consideration how this property had been managed previously and it was managed with domestic livestock. Since the purchase, FWP has managed it without domestic livestock and this has changed the habitat of wildlife that exist within the WMA.	
	Having a viable grazing plan has proved to be very successful for other WMA's and as an organization RMSGA feels it must be a part of this current management plan that is being drafted.	
10	The Gallatin Wildlife Association (GWA) is a non-profit volunteer wildlife conservation organization representing hunters, anglers and other wildlife advocates in Southwest Montana and elsewhere. Our mission is to protect habitat and conserve fish and wildlife. GWA supports sustainable management of fish and wildlife populations through fair chase public hunting and fishing opportunities that will ensure these traditions are passed on for future generations to enjoy. We support the Montana constitution which states: “the opportunity to harvest wild game is a heritage that shall forever be preserved” and that “the legislature shall provide adequate remedies to prevent unreasonable depletion of natural resources.”	Hockett, Glenn; Gallatin Wildlife Association; president
	GWA questions the adequacy of the stated primary purpose of the habitat plan: to “benefit wildlife and fish habitats” (p. 8). We agree that the primary purpose should relate to wildlife conditions, as opposed to secondary goals. However, we note that the ultimate purpose of benefitting habitat on a WMA is to maintain and manage wildlife populations. Thus, we suggest adding “and populations” to this goal statement. We also note that it will be necessary to measure trends for selected key species of wildlife and fish populations on the WMA, in order to evaluate effectiveness of FWP activities. (The common FWP practice of evaluating WMA management practices almost solely with vegetation studies is not sufficient to determine if public resources are being used efficiently and effectively to achieve stated wildlife and fishery goals. Population responses must be measured. See below.)	
	We support the strategic purchase or exchange of lands with NRDC, the Forest Service, or private owners in order to consolidate FWP holdings at Spotted Dog. This should reduce administrative costs and reduce or eliminate constraints on selecting management practices and achieving FWP’s primary objectives for the WMA.	

While there appears to be no absolute commitment in the Plan for developing a livestock grazing program on Spotted Dog, the possibility of a grazing program is mentioned often and GWA expects FWP to promote a program similar to those on so many other WMAs. In this regard, we note information (pp. 3-4) indicating that enhancement of the elk population should not be used as a justification for a livestock grazing program on Spotted Dog. (1) Elk numbers in HD215 doubled during 2008 – 2017, with "limited grazing" on the WMA during 2010 – 2013, and no grazing of livestock during 2014 – 2017, indicating that livestock grazing is not necessary to enhance elk numbers. (2) Elk numbers in HD215 are about 100% over the objective in the Elk Management Plan, so committing FWP resources, presumably to enhance the population, would be inconsistent with achieving this objective.

GWA recommends establishing two representative control areas of 1 square mile each on Spotted Dog. These would be useful in the future for comparing and monitoring effects of management activities on the remainder of the WMA. Control areas should contain both riparian and upland habitats. They would receive no habitat manipulation (other than possible local weed control) and be off limits for some activities, including livestock grazing, fencing, roading, camping, etc.

We strongly agree with the Plan's emphasis on the values of wetlands, seeps, springs and riparian areas, and its commitment to protecting these areas. This commitment should preclude water diversion, which does not seem to be mentioned.

We encourage widespread reestablishment of beaver with dedication of sufficient riparian habitat to allow for long-term rotating occupation of dam sites. We believe that abundant and well-distributed beaver ponds are a critical habitat need of moose. They provide abundant moose forage and also escape habitat for moose calves in the presence of wolves. In this regard, please consider an extensive project to test and demonstrate management of riparian habitat for moose.

GWA believes the wildlife values of grazing programs on many other WMAs have not been justified or demonstrated – either with objective reviews of the scientific literature or with on-the-ground testing on the WMAs. (We have submitted abundant references to the science literature questioning the wildlife values of livestock grazing. These are available on request.) Moreover, negative effects of livestock grazing on WMAs have included abundant fencing, diversion of natural waters, degradation of riparian areas, weed dispersal, degradation of nesting habitat, and competition for forage. For these and other reasons, including paragraph three above, GWA requests that Spotted Dog not be grazed by livestock. It should provide a real wildlife area that would add to landscape diversity amongst the majority of surrounding lands that already have livestock grazing.

However, if Spotted Dog is to have livestock grazing anyway, Spotted Dog offers a new opportunity to test FWP assumptions of the wildlife values of grazing. We would suggest a designed comparison of wildlife responses to grazing frequency by comparing trends of wildlife use on ungrazed control areas vs. infrequent grazing (once each 4 years) vs. the 3-pasture rotation system commonly used by FWP with grazing twice each 3 years. In any event, any grazing system on Spotted Dog should be applied with ungrazed control areas to provide reliable information on grazing impacts to key wildlife species and to test whether livestock grazing provides

GWA suggests minimizing fencing and any new roads, consistent with providing appropriate but limited vehicle access. Any predator control on the WMA should only be in response to a documented need for human safety or to prevent property damage on neighboring lands, where the problem may not be solved by actions off the WMA.

We find only a weak and vague commitment to "maintain and restore" species of concern "when appropriate". (Nine birds, 3 bats and 1 amphibian are variously listed as "examples" of species of concern on Spotted Dog, pp. 36-38.) We request that a more complete list of species of concern that are expected on Spotted Dog be developed promptly, for the record. Under what conditions will it be "not appropriate" to maintain and restore species of concern? It is noted that inventory and monitoring of all species of concern can detect population declines (p. 38). But there is no commitment to this activity for any species. (Exploratory inventories of non-game may occur occasionally – p.30). This issue needs more attention than provided in the Plan.

	We find the commitment to monitoring (pp. 4; 29-30) to be inadequate. The emphasis is upon measuring condition and trend of vegetation every 5-10 years. Methods and standards for these surveys have been developed primarily for evaluating livestock ranges for livestock production. They are not adequate for dealing with the full range of wildlife relations to habitat structure or to disturbance-succession gradients. Largely, they ignore the concept of limiting factors. (Resources may be spent producing habitat that is not limiting to a particular population.)	
	The Hansen vegetation surveys will not provide information on wildlife responses to management activities. Wildlife population surveys designed specifically to evaluate management effectiveness are needed. “Fish and wildlife surveys, scheduled as needed in accordance with regional information priorities” (p. 30 and elsewhere) will be inadequate for this purpose. There must be a commitment to evaluating responses of key wildlife species to management, with sufficient sampling and control areas for comparison. This is active-adaptive resource management that can lead to more effective and efficient use of public resources.	
	Thank you for this opportunity to comment on the Spotted Dog WMA Habitat Plan, 2017.	
11	The Montana Wildlife Federation is our state’s oldest wildlife conservation organization. We were formed in 1936 when hunters joined landowners to restore depleted wildlife in our state. For 81 years we have worked to ensure abundant wildlife, healthy habitat and public opportunity to enjoy our public resources. Our members have a strong interest in the future of the Spotted Dog Wildlife Management Area. Many hunt on the area and several have been engaged in discussions as we look to what the future of this WMA will be.	Gevock, Nick; Montana Widlflie Federation; conservation director
	We support the key points that three of our affiliates – from Helena, Anaconda and Missoula – that have submitted formal comments on the management plan. With that in mind, MWF encourages Montana Fish, Wildlife and Parks to consider these key elements to future management of Spotted Dog WMA.	
	1. Consider more than just elk in the management of Spotted Dog WMA. The report is heavily slanted toward elk. Clearly this area was purchased with elk as a major emphasis, and it supports a large herd that offers excellent public hunting opportunity. However, there are also pronghorn antelope, mule deer, white-tailed deer, black bears and wolves there. These game species need consideration in the management of the WMA. Spotted Dog is also part of a key corridor for grizzly bears between the Yellowstone and Northern Continental Divide ecosystems. The management of this area also needs to consider the numerous non-game species, including songbirds and small mammals. Take a more holistic, ecosystem approach to this area’s management and work for balance for all native species.	
	2. Any livestock grazing must be done so that the primary purpose is to benefit wildlife. The area is clearly degraded by years of overgrazing, and it needs significant rest before any livestock are grazed there. It needs work done on internal fencing to make wildlife movement easier, and riparian areas need to be kept free of livestock for considerable time to recover. The area needs a livestock grazing management plan before it can be grazed. And any grazing must have a net benefit for wildlife, including elk, by garnering more tolerance for elk on adjacent private lands at certain times of the year. There are other examples in Montana where grazing on a WMA has been done in conjunction with a landowner who provided winter forage for elk when it’s needed. Look at these models to develop a plan and work with local stakeholders in its development.	
	3. There should not be hunting on the WMA outside of the archery and general rifle seasons. Special shoulder seasons should not be extended onto the WMA, since these lands are meant to provide winter range for elk and other wildlife when it’s most needed. In addition, with the purchase of the WMA, there is far more land in the hunting district that is public, with a primary purpose of providing wildlife habitat. The elk objective for the district needs to be raised to account for that.	

	4. More attention needs to be paid to the fisheries value of the streams on Spotted Dog WMA. The area has streams that support native cutthroat trout, and these should be enhanced to promote their population.	
	5. Travel planning and public access should be aimed at ensuring good access to get to the WMA, but also maintaining security habitat for elk and other game species. We do not need additional motorized use in the WMA, because the current amount of open roads helps maintain good elk security and that in turn creates hunting opportunity.	
	Thank you for the opportunity to comment on the management plan for this quality WMA. We are committed through our members and affiliate clubs to be good partners in helping improve the management at Spotted Dog to benefit wildlife, and Montana's hunters and anglers.	
12	The following comments are made on behalf of the Clark Fork Coalition (CFC) and relate to the Draft Management Plan for the Spotted Dog WMA prepared by Montana FWP with the support of the Spotted Dog Working Group.	Gorder, Andrew; Clark Fork Coalition; legal director
	The Coalition is actively involved in the ongoing restoration work within the Upper Clark Fork and has a vested interest in protecting clean, cold and abundant water within the basin. In addition, the Coalition has a vested interest in water quality as the owner of senior water rights in the Upper Clark Fork dedicated to instream flow purposes for the protection of the fishery resource.	
	In general, CFC supports the plan's steps to protect and enhance the natural resources of the Spotted Dog WMA. We offer the following comments specific to the fishery resource, including water resources, stream habitat conditions and riparian health.	
	CFC encourages FWP to identify the waterways that are most at risk and prioritize this work based this need. According to Hansen et al. 2015, the largest needs appear to be in MU-5 on Trout Creek, which was categorized as "unhealthy" on the whole. Other waterways assessed in MU-1 (O'Neill Creek), -2 (Freezout, Jake and Fred Burr Creeks) and -3 (Spotted Dog Creek) were categorized as "healthy, but with problems."	
	CFC concurs with FWP that one of the primary detractors from the health of the fishery resource and riparian areas within the WMA is from trespass cattle. However, while the plan recognizes that riparian fencing is needed to keep livestock out, there are few details about where or when the fencing will be installed.	
	Regarding sediment delivery to streams, CFC supports the Priorities for Special Projects to aid wetland and riparian health, which includes redistribution of beaver as the forage base would provide. FWP has historically recognized the benefits of beaver and beaver ponds, which help improve water quality by removing or transforming excess nutrients, trapping silt, binding and removing toxic chemicals and filtering out sediment	
	Finally, the plan recognizes that road culvert adjustments/replacements are needed on a minimum of 25 culverts to reduce negative sediment impacts to streams on the WMA. The plan further states that active stream restoration is needed in at least some areas to address habitat degradation and channelization. However, little detail is provided to explain what concrete actions will be taken or when these will occur.	
	Again, we support and appreciate FWP's and the Working Group's efforts to protect Spotted Dog's Resources. Thank you for the opportunity to comment.	
13	I support protecting as much of Spotted Dog WMA from livestock grazing as possible. Its my understanding that since grazing has been reduced on the WMA, elk have been more frequent. This presents great hunting opportunities for sportsmen. Thank you.	Russell, Alex

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14	I would like to say that I appreciate the work that was put into the "Draft" Spotted Dog Wildlife Management Plan 2017. The broad approach and the attention to the science of habitat management were impressive. There is an underlying sense of the sincerity of mission that is obvious to the reader and participants in this process.	O'Rourke, Craig & Barbara
	During the meeting of 11-30-17 some errors were pointed out. I am sure these will be corrected prior to the final plan coming out. Some of these were of little consequence, but important none the less.	
	I would like to focus my comments in a few very specific areas. Some overlap, but I will try to be very specific in organizing my thoughts as they apply to the Goals and Objectives of the Spotted Dog WMA.	
	OBJECTIVES/GOALS: #1. "The primary purpose of the Spotted Dog WMA is to benefit wildlife and fish habitats and natural resources on behalf of the general public."	
	#2. "Actions will be sustainable for future generations."	
	#3. "Provide access for a wide variety of uses consistent with the management plan."	
	#4. "Be a good neighbor with the landowners and residents of Powell County."	
	WEEDS or INVASIVE SPECIES: Obviously, weeds are not good habitat for the wildlife, in most case. I would like to see more weed control, spraying of spotted knap weed, along the closed roads. I walk extensively on these roads and observe severe infestations that are easily accessible. I would also like to see more attention to weeds along the boundary lines, especially on the east side of the WMA. It is very obvious that neighboring landowners are doing a much better job of controlling weeds than the WMA. This does not speak well when considering OBJ. #4.	
	GRAZING: It was stated at the meeting on 11-30-17 that grazing was not being considered in this plan and that it would require a MEPA document should it ever be considered. I do not believe this is the case. Grazing was a big part of the management of the WMA until a couple of years ago. It is nothing new to this property.	
	It is my opinion that grazing could be a useful tool to help meet the objectives of the WMA. FWP touts great success in other areas with elk and cattle actually complimenting each other by utilizing the available forage more efficiently. In some areas of the WMA grazing of cattle or sheep could be used as a tool to control some weeds and better utilize the available forage. It seems like the FWP is very inconsistent in their opinions of grazing elk range.	
	Grazing would also provide funds to help with many expensive needs of the WMA, such as weed control, road maintenance, fence construction and maintenance, as well as enforcement of the rules.	
	Grazing could support all the objectives, if done on a limited basis and managed properly by the WMA and the people having livestock on the property.	
	ACCESS: I feel strongly that the current access to the WMA is more than adequate to meet the objectives. I am adamantly opposed to opening of the Old Stage Road (OSR) as is proposed by the Powell County Commission. The FWP should apply all pressures available to them to insure that this road remain closed. FWP has an enormous ability to lobby at all levels	
	The OSR in question, beginning on Freezeout side, crosses approximately 2.5 miles before it touches the WMA at the wire corrals. For this approximate distance it crosses private land. After a very short distance on WMA, it then enters private land again for most of 2 miles. The wire corral access point is only a short walk from the parking lot at the end of the O'Neil Creek Ridge Road. I have walked this route several times and cannot understand what advantage having driving access to the wire corrals would provide.	
	The OSR, if opened would only serve as another problem of weed control and erosion. We all know that Powell County can't keep up with existing roads. Why would we assume they could control weed infestations and erosion caused by vehicular traffic across the WMA.	
	The OSR crossed the heart of the WMA. Opening this route would be detrimental to the migration habits of the elk that use the winter range. The elk need the winter months to rest and prepare for calving. Snowmobile traffic would interrupt this pattern.	

	The landowners that are directly affected by the opening of the OSR have been more than generous to hunters that are willing to be respectful and respect the land. I personally have been treated fairly by them when asking permission to hunt. These landowners support efforts by the FWP to control elk numbers. They also cooperate with the shoulder hunts on the private land. I only wonder how long this cooperation will last when the public is allowed to drive across their land on the OSR without limitations.	
	Opening the OSR goes against all 4 of the objectives of the WMA. This should be priority #1 on the list of things to stop by the FWP.	
	ENFORCEMENT OF RULES: I first began recreating on the WMA in the early spring of 2011, shortly after the gates were opened. I have continued to hike, hunt and enjoy the property since that time. In almost 7 years I have never seen any FWP or other enforcement folks. Yet every spring there are ATV tracks all over the property that were made during the closure period. This needs to improve to meet the objectives of the WMA. Closure should mean everyone!	
	During the 2017 hunting season I saw evidence of an elk being dragged out of O'Neil Creek with an ATV. Again I have never seen a FWP warden or employee on the WMA. I understand the cost of this enforcement, but to meet the objectives, enforcement is paramount.	
	Why would I expect to see enforcement of staying on the road should the OSR be opened? The sheriff of Powell County surely won't patrol it, especially during the winter months when snowmobiles are using the route.	
	CONSOLIDATION OF DNRC AND FWP LANDS WITHIN THE WMA: I am absolutely opposed to the consolidation of DNRC and FWP lands within the WMA. The DNRC are multiple use lands that are supposed to be managed for the benefit of the School Trust. This would be lost if totally owned by the FWP. The school trust lands should be sacred and untouchable forever.	
	HUNTINH DURING CLOSED PERIOD: I am opposed to any hunting on the WMA during the winter closure. Winter hunting would be directly in conflict with the objective that gives wildlife a safe place to winter and prepare for spring calving. The WMA is deemed to be winter range for elk and mule deer. Hunting would disrupt this immensely.	
	The shoulder hunts on private land seem to be working well. They not only help reduce numbers, but also help keep the elk and deer off the private lands and out of some hay stacks. This supports the objective or working with the neighbors and the public. Again I will state that the neighboring landowners have been very generous about letting people hunt on their property.	
	Thank you for your efforts and hard work. I appreciate the opportunity to be a small part of the future of this magnificent property.	
15	1. Most importantly, we support managing the publicly acquired spotted dog WMA as intended by the grant monies awarded to MT FWP, for the purpose of protecting fish and all wildlife populations, and the land itself. I applaud FWP and working group efforts to comprehensively consider and prioritize the diverse wildlife species and habitat types on the WMA.	McEvoy, Stephen; Helena Hunters and
	2. [FWP note--paragraph/bullet #2 was a very long paragraph; we have divided it into 6 sub-paragraphs so it can be adequately displayed in this Excel format.] The first few paragraphs of the plan emphasize the plan does not specifically address elk populations or objectives. Discussing exact objectives in this report may be outside the Habitat Plan scope, but it's deficient to avoid any reference to big game carrying capacity or habitat requirements. It's also inconsistent to produce a "habitat plan" replete with references to livestock grazing, and at the same time absolutely avoid forage availability conflicts and interactions between cattle and elk on the WMA, as well as impacts to big game and wildlife in general by grazing on the public WMA.	

Appendix H—Public Comment

Although a key issue in determining wildlife habitat quality on the WMA, the Habitat Plan is severely lacking by excluding any analysis of big game habitat potential. Although discussion relating to big game numbers was discouraged for the public, and deemed irrelevant within the plan itself and during the habitat plan review meeting, the Region 2 FWP supervisor privileged himself the opportunity to voice his *judgment regarding elk populations during the hp review, saying "we have too many elk already". Despite this statement, and numerous references to grazing the WMA, and in an effort to diminish the relationship between forage unavailability on public lands and "elk damage" to landowners, the habitat plan states "these facts do not preclude livestock grazing as a tool for enhancing wildlife habitat on portions of the WMA….".*

The "bitterbrush" section further recommends elk numbers be "balanced" (ie. kill more elk, but no mention that early season cattle grazing is especially detrimental to bitterbrush, when carbohydrate reserves are being replenished.), although the subject of cattle grazing impacts to big game forage is avoided. Habitat is the basis for determining wildlife numbers, and one of the main components of habitat is food (forage). Why would a "habitat plan" avoid any reference to big game carrying capacity, when habit quality and availability is impacted by population? Because population objectives are addressed by the elk management plan doesn't mean population relationships to habitat can't be discussed, and those considerations incorporated into the plan. The WMA was in part acquired for its outstanding and critical big game winter range. Avoiding scientific assessment or reference to carrying capacity neglects an additional and important metric to assess habitat quality and potential, a metric useful at FWP Commission meetings if amending elk population objectives are to be scientifically discussed. But the "habitat plan" says nothing about forage capacity for big game, and because the working group and habitat plan have not addressed it, information wont be available for evaluating population objectives, or for generally informing the FWP Commission. This omission makes data based review of population objectives less likely, and stacks the deck in favor of lower population objectives. The report spends a large amount of verbiage on "health", but the state of habitat condition depends directly on habitat use and impact by varying population.

Elk population objectives haven't been reviewed since 2008, so don't account for 59 sections now being managed specifically for habitat. When managed for wildlife the WMA should allow for a higher population objective than in 2008. Fifty nine square miles offers huge amounts of forage, and big game will spend an increasing amount of time on the WMA by virtue of its size. In response to impacts by elk to private lands, and as measure of forage availability, it's important to consider impacts of past and current cattle grazing on *public land to public elk herds. As a measure of forage availability, lease capacities on DNRC and adjacent USFS lands account for over 4100 AUM, or 350 cow/calf pairs on a twelve month basis, or 1300 mature elk year around. Again, this forage volume accounts for public ground only, and doesn't account for 43 square miles (27,600 acres) already owned by FWP. With improving range conditions on the WMA, it's reasonable to expect healthier grasslands and better forage availability. Obviously the forage base is adequate to sustain more than the current elk population "objective", and is reason to consider management alternatives given increased habitat area.*

Elk populations compete with private interest grazing entities, but this land was acquired with funds prioritizing wildlife resources as first priority to benefit the *general public. The right to participate in WMA management shouldn't be confused with an expectation to personal financial interest through grazing by any party. The intent of the purchase was to prioritize fish, wildlife, and habitat. Nonetheless, past SDWG meeting minutes indicate surrounding landowner interest in grazing cattle on the WMA. A FWP biologist mentioned (5_18_17 SDWG minutes) that "we have been having landowner meetings and there is a lot of interest in having the spotted dog being a part of their landscape" (ie grazing program).*

Forage competition between cattle and elk is a vital issue, and forage is connected to habitat in a fundamental way. Draft authors refuse to discuss elk numbers, but at the same time entertain cattle grazing, completely without discussing impacts to elk habitat and habitat in general. For all the euphemistic talk about cattle grazing "enhancing habitat", the report contains no data referencing habitat enhancement by cattle grazing. Please cite conclusive applicable data on how cattle grazing will enhance habitat with respect to habitat objectives and governing conditions found on the WMA. The WMA is large, and has the capacity to attract large elk numbers for extended periods of time. Diminishing WMA forage risks aggravating private land conflicts.

3. The habitat plan specifically mentions these objectives among *many others:*

--Protecting aspen and riparian areas

--Preventing conifer encroachment in aspen stands

--Preventing stream side erosion, sediment, incised channels, and noxious weeds

--Providing for more vegetative litter and decay

Cattle grazing has been shown to be frequently and in practice incongruent with these objectives.

4. Regarding the "guiding principles" statements prefacing the habitat plan, Statement 4 urges that (FWP) "be a good neighbor with the landowners and the residents of Powell County". Just as importantly, landowners are to be good neighbors to FWP and all Montanans, regardless of proximity. Taxpayers bought it, and don't have to live in Powell county have a seat at the table. Nor do they have to live next door to value the WMA. The 2013 grazing extension came about in response to uncontrolled stock. Even after the grazing extension ended in 2013, the acquisition has still been grazed by "neighboring" but trespass cattle. The public is contributing $146k to fencing costs to prevent unwanted cattle from negatively impacting habitat and sensitive riparian areas. Despite what range laws may say, "good neighbors" control their stock, and respect neighboring land owners, even when land is in public ownership. The public is paying a neighborly sum $400k for weed suppression to improve native plant communities. Neighboring land owners oppose higher elk populations yielding increased public hunting opportunity, but often generate private income by denying the public permission to hunt during the general season, and/or frequently deny public hunters the chance to take a bull as allowed under general regulation. In past working group meetings FWP has suggested the public, after buying the ground, will pay for fencing materials. While I support working for solutions that address losses to landowners, I urge FWP and working group members to accommodate and prioritize public interest on the WMA, and make sure "being a good neighbor" is a two way street.

5. Manage conifers? These lands were *extensively logged by RY Timber Company soon before being purchased by FWP. Google earth images plainly show the land has been thoroughly logged. Roughly 25% of the WMA is classified as "coniferous forest" by Hansen (Ecological Inventory 2015). More accurately, this "coniferous forest" has lost much of its integrity as a forest. These woodlands and conifers don't need to be "managed", they need to recover. Given the intense logging over the larger landscape, and a large amount of recovering indigenous grassland area, "conifer encroachment" isn't detrimental at this time. Prior to extensive logging, conifer encroachment was likely encouraged by intense grazing, and may have been a problem. Wildlife of all types utilize and need low elevation timber stands and thickets, especially during cold and windy conditions. Thermal cover and more dense stands relatively close to feed are especially important to winter habitat, and will help keep wintering big game on the WMA. Thin and residual timber within large logged areas does not provide quality thermal and security cover. The plan mentions developing a "forest management plan" to bring about a "healthy forest structure". Please define a "healthy forest structure" and explain why it is "healthy". These terms sound well intended, but are general with widely varying interpretation. Without definition, they can be used to justify ecologically detrimental treatments/management plans.*

	6. On page 35, the “Management Direction” section calls for cattle grazing to be considered to “stimulate and maintain native forb component in grasslands”. Within range literature, “excellent” range condition is referred to as the “climax” vegetation community, because by definition it’s the plant community having developed and matured under natural conditions. Past economic grazing has left the land in the shape it is today. Plant communities are beginning to recover from cattle grazing. For millennia these grasslands have done just fine providing for a ratio of increasers to decreasers. These grasslands don’t need cattle grazing to be “healthy”. Sure grasslands have always been grazed to some extent, and wildlife can provide it. Please provide data showing how cattle grazing will “maintain the native forb component”, and why the native forb component is unable to exist without cattle grazing.	
	[7.] Also with cattle grazing comes the need for fencing dividing the land into separate areas. Given the size of the WMA, this could easily entail many miles of fencing. And riparian and sensitive areas would require fencing. Not good for people or wildlife.	
	8. On pg 39 under the sub section “prioritizing elk winter habitat”, the following statement is made: “Control hunting access if required during winter months to achieve elk harvest goals, while minimizing disturbance to elk on their winter range”. The suggestion that elk be hunted while wintering on a 59 square mile piece of ground able to support their wintering habitat needs, and bought for such purposes, is illogical. Winter hunting to “move elk around” during winter months 1) opposes efforts to keep elk on the WMA, 2) is biologically unsound, 3) ultimately diminishes hunting opportunity, and is un-sportsman like when elk weakened and stressed during late winter months . Of special note is the fact that some neighboring landowners don’t allow hunting. Landowners asserting their right not to allow hunting shouldn’t expect public wintering grounds to be kill zones for shoulder seasons.	
16	This is in regard to Bonneville Power Administration's (BPA) receipt of your notice of the draft management plan (DMP) for the Spotted Dog Wildlife Management Area (WMA). A brief review of the DMP shows that two Management Units, O'Neill Creek and Freezeout-Jake Creeks, have boundaries that surround our BPA 500 kV powerline, Broadview-Garrison No. 1 and No. 2. We are aware that this DMP encompasses plans to identify priorities and strategies for conserving fish and wildlife habitat in these areas. BPA's priorities throughout this plan's implementation will be to work with your agency and ensure that access to these lines remains unobstructed.	Smith, Dustin; Bonneville Power Administration; realty specialist
	Please keep me updated as the plan's framework continues to progress. If you have any questions or to discuss this issue further, please contact me via regular mail at Bonneville Power Administration, Realty Specialist, TERR/Kalispell, 2520 Highway 2 East, Kalispell, MT 59901, via email dtsmith@bpa.gov, or telephone at 406-751-7824.	

Appendix H—Public Comment

FWP and the Spotted Dog Work Group held a public meeting on November 30, 2017 to solicit public input on the draft Habitat Plan. Following are meeting notes taken by Jodi Pauley for the Work Group.

SDWMA Public Meeting November 30, 2017

Public Meeting for the draft management plan was called to order by John Hollenback at 6:40 pm on November 30, 2017 at the Elks in Deer Lodge. Members present were: Neil Horne, Louis Smith, Dan McQueary, Pat Hansen, Jodi Pauley, John Hollenback, Jason Swant, Bill Pierce, Bill Mosier, Gayle Tomlinson, Brian Quigley. FWP present: Rick Northrup, Randy Arnold, Jason Lindstrom, Brady Shortman, Julie Golla, Kelvin Johnson, and Mike Thompson.

Mike introduced himself at the public meeting. He said we called this meeting to go through the management plan and come to a mutual understanding on what should be included or taken out of the plan. He gave a background of the Spotted Dog and how FWP came about to purchasing the property. He said FWP also felt it was important to have a citizen's work group and that was formed in 2013. He said this meeting is designed to take in public comment, take detailed notes and then the committee will deliberate as a work group and decide how to implement those comments. This is a working document and will change in the future as we move forward.

Mike said the work group was formed in 2013 and the group decided to have John Hollenback be the chairman of the group. John gave a history of how the working group was formed. He said this group has taken tours of the Spotted Dog to get to know the landscape better and learn more about the habitat of Spotted Dog. He said we also worked on doing some education of how other WMA's work, the members, and other assessments were done by FWP. We also broke our group into special committees dealing with public access, wildlife, natural resources, history, etc. and this was the backbone to developing the management plan. John said he thinks this committee should continue meeting in the future to make sure that the property continues to go in the right direction. He said we have to remember this property was bought for wildlife enhancement.

Mike said we will take comments through December 8th on this management plan. Mike said the meat of the plan is in the executive summary. He also highlighted what is in the management plan. He said the Spotted Dog is not a stand- alone property but part of a larger ecological system and the areas surrounding the property. He said part of the charge is winter habitat for elk and this is a major part of our management plan.

Mike moved into discussing the Executive summary and one of the major discussion areas is our current elk numbers and that there are too many and instead of trying to manage habitat for increased elk we need to manage our elk numbers and that is being taken care of in a different area of FWP on a statewide basis. He said at the same time we need to still be managing habitat for the Spotted Dog and surrounding areas.

Mike said the Spotted Dog wildlife management area is for public input and for public access. He said the working group was the public's voice to get to the draft of the management plan. He said this is not a MEPA document. He said where MEPA would be introduced, for example, is if cattle grazing became a tool then that would go before the public and the commission and through the MEPA process. This document gives us the sideboards to get started to implement any of those types of proposals that are brought forward.

There was a question about access during the winter months in that snowmobiles need to stay in designated areas but what about walking or cross-country skiing, etc. Mike said people can walk in there or cross-country ski and he said that could be clarified better in the public access area.

There was a question about camping and how that is going to be handled between DNRC and FWP managed lands.

There was a question about opening the old stage road and how would FWP handle snowmobile access as that could create a conflict of interest. Bill Pierce commented that the old stage road has always been a public access road and has been a public

road all along. He said about 40 years ago that road was basically locked off and simply has not been used. He said the current commission is wanting to open the road and if that happens it would be open to wheeled vehicles and could be open to snowmobiles. He said that road is out of the jurisdiction of FWP and is in control of the county. Randy said right now it is still moving through the district court system. The comment was why is this an issue all of a sudden when it is public ground because before when it was private land it was never an issue. Bill said it is out of our control on what the county does.

Joe Dippold asked on Page 15 how are the Management Unit boundaries identified. Mike said it was identified by the water shed boundaries basically.

Joe Dippold asked on Page 30, about the basics of inventory and is that only going to happen every 10 years or would there be other changes in between. John commented that he thought it would be ongoing, the every 10 years would be an in-depth assessment only but there would be other assessments in between so it doesn't get out of hand. There was agreement that if situations arose that changes should be addressed.

Joe Dippold asked what kind of partnerships is FWP looking at with private landowners to work on management schemes from grazing to weed control, etc. Kelvin said one of the management schemes is being a good neighbor and working with surrounding landowners to expand the footprint of the WMA. Kelvin said we hope that by working in partnerships we can enhance other wildlife habitats, etc. He said he and Julie have visited with the surrounding landowner and what kind of viable grazing options can happen with neighbors.

There was a comment about curlews and what kind of habitat they like, Kelvin said they like the land hammered or more open and short grasses, etc. There was a public comment that two FWP personnel had now used the word "hammered" and that is not the kind of word we should be using when discussing rangeland or wildlife resources. The comment was that curlews like short bunch grass areas. Kelvin did apologize in that he did not mean to say hammered but was using it more as a reference tool to compare between wildlife habitat scenarios. Mike also went on record for saying he did not mean that in the context when talking about resources of the WMA.

Dwight Crawford asked why can't grazing be included in this plan and why do some things have to go through MEPA and others do not. Mike said right now we are not far enough to include grazing in this plan but it could be done in the future.

Dwight Crawford asked what does a healthy forest mean as defined on page 28. Mike said it means a lot of thing such as weed encroachment, etc. It is more about what is on the ground currently.

Anaconda Sportsman made a comment in that we support grazing as long as it enhances wildlife and following the model that was done on Fleecer as it is a good model to show the cooperation between private and public lands.

He said the conversation is always about elk but we have consider the other species especially mule deer and antelope. Antelope are increasing and mule deer are disappearing.

The other issue is a shoulder season and Anaconda Sportsman are against having any shoulder seasons on public lands. Shoulder seasons need to be handled on private properties. The WMA has made a contribution to the health of elk but having a shoulder season is not supported by sportsman on public ground.

There was a comment about beavers and he felt that beavers needs to be re-introduced for stream health. He said cattle have trashed this property for 70 years and he felt that there should be no cattle on this property for the next 20 years.

There was a question about the county road and he wondered why FWP is not talking to the county commissioners and they should continue to keep that communication open between the agency and the county.

Appendix H—Public Comment

Public meeting notes continued from previous page . . .

There was a question about if there has ever been an inventory on carrying capacity of these properties and forage volume that is being taken by grazing on public ground. Mike asked if he meant the WMA specifically or all public ground. This was not clarified but the comment was that with public leases, the forage volume that is being taken away could be replaced with 1300 head of elk.

There was a question about fire on the WMA and how would that be managed especially on a grassland area and how are prescribed fires going to be managed as he would like to see more of that in the plan.

Gary Swant asked how would grazing be managed and would they have to do it by foot or horseback since the general public has to do the same with no motorized vehicles.

Matt Graveley said if a rancher is grazing, he is working to improve the habitat and is working for the FWP. He said it is also a benefit for both properties.

Marty Dippold commented about predators and the only predator he sees right now on the WMA is human beings controlling the movement of wildlife, etc. He said if you don't control your predators, it changes the movement of elk, etc. We have large herds of elk that are destroying public and private grounds as they are no longer in little herds scattered through the landscape.

Matt Graveley asked if there is a plan to do an inventory in MU 5. As that can be a problem with weeds between the forest service and the WMA, etc.

There was a question about what happens if someone gets burned out can the WMA be a temporary place for someone to bring their cattle, etc. Mike said that can be complicated as do we have the infrastructure to make it work, and then the fact comes that could come up every year and how do you make those fair management decisions.

Rick Northrup said right now they are working with a rancher in eastern Montana to see if he can use one of the WMAs in that part of the state to give them a year of relief.

There was a question about the reservoir and what is the long term plan. Jason Lindstrom commented in that the water rights are owned by a private landowner and FWP has no rights to the water. He said they would not be stocking it with fish as it has live water coming in there but is a non-channeled reservoir. Public can access it but there won't be any future development for now.

Meeting was adjourned,

Respectfully submitted,

Jodi Pauley, Secretary

Crusted, drifted and blowing snow covers the northwest portion of Spotted Dog Wildlife Management Area and elk winter range, viewed from Beck Hill Road on February 23, 2018.


Julie Golla, 31 March 2017